

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

VOL. XI. No. 8.
WEEKLY.

BALTIMORE, APRIL 2, 1887.

\$3.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Sole Manufacturers of
EUREKA PACKING

JAS. SMITH & CO.

Dealers in

MANUFACTURERS', MILL and ENGINEERS'

Steam, Hydraulic and Locomotive Packing,
OF EVERY DESCRIPTION.

Works, 413 to 421 Race St., Cor. of Crown.

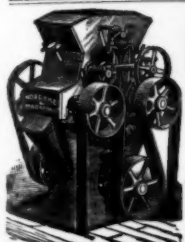
SUPPLIES

OF EVERY DESCRIPTION.

Send for Prices.

Office & Store, 137 Market St., Philadelphia.

CIRCULARS AND PRICE-LISTS MAILED UPON APPLICATION



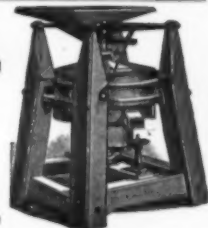
Milling Outfits for Flour and Meal.

WE MAKE ROLLS AND PORTABLE MILLS COMPLETE.

Manufactory Established in 1851.

Pamphlets with Prices Mailed Free.

NORDYKE & MARMON CO., INDIANAPOLIS, IND.



ELEVATORS

MORSE ELEVATOR WORKS.

MORSE, WILLIAMS & CO. Successors to CLEM & MORSE

Manufacturers and Builders of HYDRAULIC STEAM, BELT and Hand-Power, PASSENGER and FREIGHT ELEVATORS

With most approved Safety Devices.

Office: 411 CHERRY STREET,

Works: FRANKFORD AVE., WILDEY & SHACKANAXON STS.

PHILADELPHIA, PA.

Branch Office, 108 Liberty Street, NEW YORK.

Send for Illustrated Circulars.

NOTICE TO Engineers, * Contractors, — MINING MEN, —

AND OTHERS INTERESTED IN
Tunneling, Shaft-Sinking, Etc.

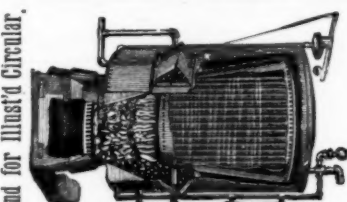
Engineers' Tables of Progress New Croton Aqueduct Tunnel

With Maps, Illustrations, and Full Description of the

NEW YORK: Size 16x16 feet; length 36 miles.

Third Edition now Ready. Sent free on Application.

INGERSOLL ROCK DRILL CO., 10 Park Place, New York.

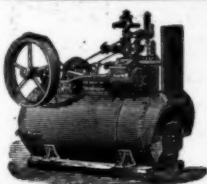


THE "GORTON" BOILER "Perfection in House Heating By Steam."

The GORTON BOILER is a Wrought Iron Sectional Tubular Independent Steam Boiler, and needs no brick work in setting. The GORTON BOILER is made of Best Refined Iron and Steel. Can be used as Self-Feeding or Surface-Burning.

It has been two seasons before the public, and received the highest praise of "Press, Architects, Builders and Physicians."

GORTON & LIDGERWOOD CO., Sole Manufacturers, 96 Liberty St., N. Y.



Plantation Engines

8, 10 and 16 HORSE POWER.

FOR DRIVING
Cotton Gins & Mills.

with **Return Flue Boilers.**

Illustrated Engine Pamphlet Sent Free.

JAS. LEFFEL & CO., 68 & 69 Wayne St., Springfield, OHIO, or 110 Liberty St., NEW YORK.

THE "OLD RELIABLE"
"Jas. Leffel Turbine Wheel"

The Best Water Wheel Ever Built.

If you are in need of a new or second-hand Wheel, write for our new Pocket Water Wheel Book for 1888. Address



THE MEDART PATENT WROUGHT * RIM * PULLEY.

OVER 300,000 NOW IN USE. THE LIGHTEST, STRONGEST, BEST BALANCED and CHEAPEST in the WORLD.

Shafting, Hangers, Couplings, &c.

MEDART PATENT PULLEY CO.,

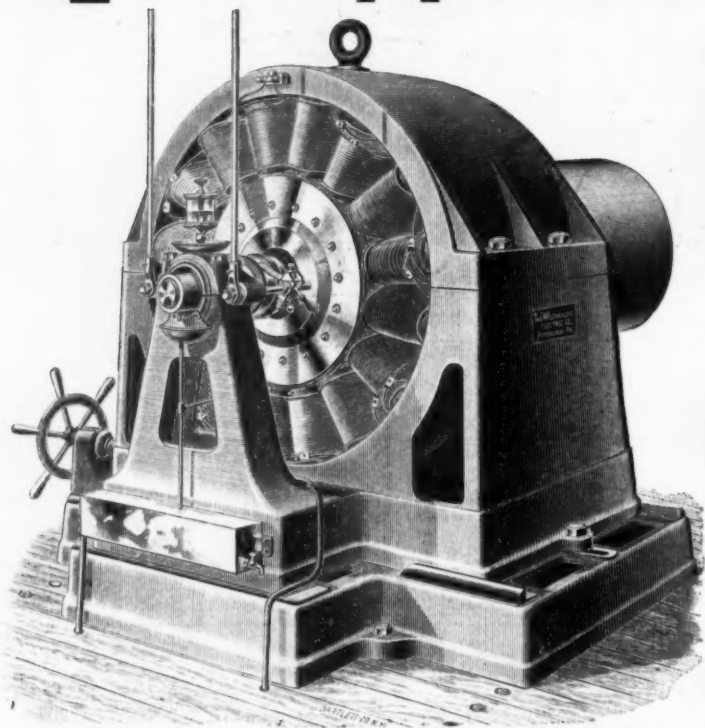
1206 TO 1214 N. MAIN STREET, ST. LOUIS, MO.

Stores: 99 to 101 W. Second St., Cincinnati.

24 & 26 S. Canal St., Chicago.

FRANK W. SWETT, MANUFACTURER OF BAND SAWS, 69 SOUTH CANAL ST. CHICAGO, ILL. EVERY BLADE WARRANTED.

THE · ALTERNATING · SYSTEM.



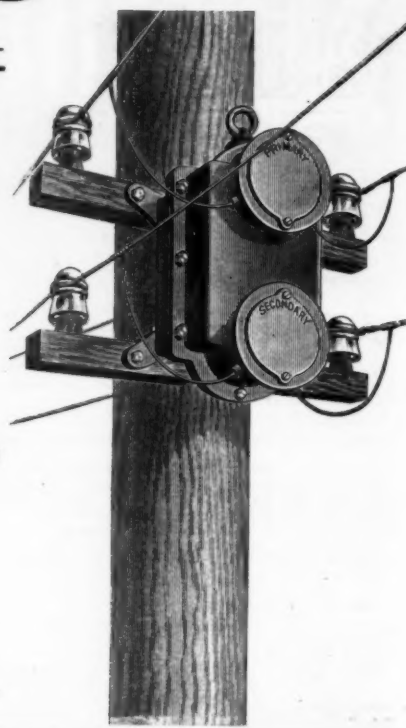
Incandescent Electric Light-
ing from Central Stations
made Universal, Eco-
nomical and Profita-
ble, irrespective of
distance.

THE Westinghouse Electric Co.

PITTSBURGH, PA.

Eastern Office:

17 Cortlandt St., New York.



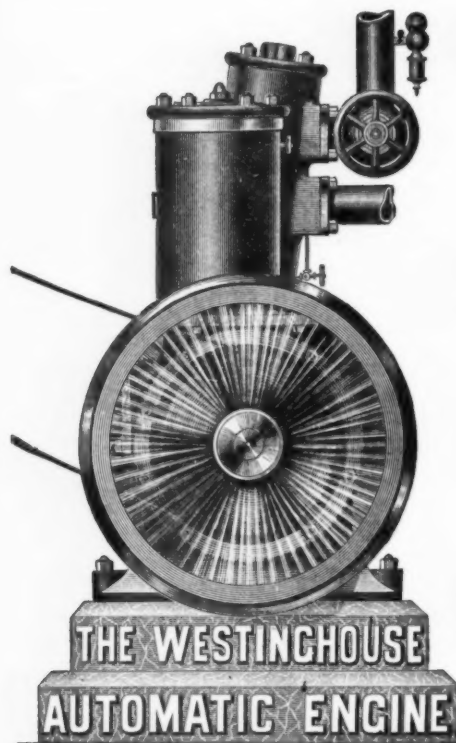
WESTINGHOUSE, CHURCH, KERR & CO.

Contracting and Consulting Engineers,

17 Cortlandt St., New York.

Hamilton Building, Pittsburgh, Pa.

The Westinghouse Automatic Engine, PRICES REDUCED.



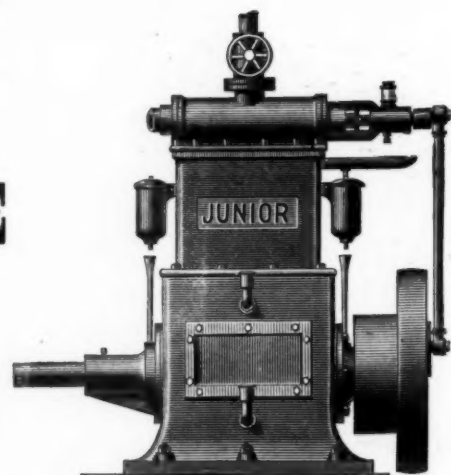
Condemned by its competitors and Endorsed
by its users.

The "JUNIOR" AUTOMATIC ENGINE

15, 25 and 35 H. P. Only.

THE LOWEST-PRICED ENGINE
IN THE MARKET.

Well Built and Serviceable.



THE WESTINGHOUSE MACHINE CO.
Pittsburgh, Pa.

SALES DEPARTMENT FOR THE UNITED STATES CONDUCTED BY

WESTINGHOUSE, CHURCH, KERR & CO.,
17 Cortlandt St., N. Y. Hamilton Building, Pittsburgh, Pa.
FAIRBANKS, MORSE & CO., - - - - - Chicago, Ill.
FAIRBANKS & CO., - - - - - St. Louis, Mo.
PARKE & LACY, - - - - - San Francisco, Cal.
UTAH & MONTANA MACHINERY CO., - - - Salt Lake, Utah.

D. A. TOMPKINS & CO., - - - - - Charlotte, N. C.
ROBERT MIDDLETON, - - - - - Mobile, Ala.
H. DUDLEY COLEMAN, - - - - - New Orleans, La.
KEATING IMPLEMENT & MACHINE CO., - - - Dallas, Tex.
IRON BAY MANUFACTURING CO., - - - Marquette, Mich.

VULCANIZED RUBBER BELTING, PACKING, HOSE.

THE OLDEST AND LARGEST

Rubber Belting with SMOOTH METALLIC RUBBER SURFACE.

This company has manufactured the largest Belts made in the world for the Principal elevators at Chicago, Buffalo and New York.

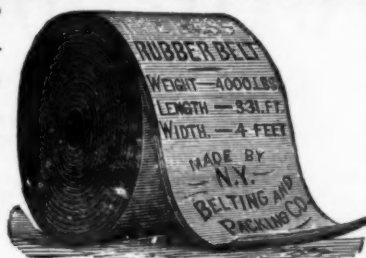


**VULCANITE
EMERY**

Saw Gummer

**DOES NOT
CASE HARDEN.**

**DURABLE,
SAFE AND STRONG.**



New York Belting and Packing Co.

J. H. CHEEVER, Treas.

Sole Mfrs., 15 PARK ROW, NEW YORK.

MANUFACTURERS IN THE U. S.

Steam and Water Hose.

RUBBER "TEST" HOSE, made of Vulcanized Para Rubber and Carbolized Duck.

Cotton "CABLE" HOSE, Circular, Woven, Seamless, Antiseptic, for the use of Steam and Hand Fire Engines, Force Pumps, Mills, Factories, Steamers and Brewers' use.

Patent Elastic Rubber Back Square Packing

Rubber Matting, Mats, Stair Trends, etc., for Halls, Flooring, Stone and Iron Stairways, etc.



BOILER and PIPE COVERINGS.



ABSOLUTELY

FIRE PROOF,

Light and Cheap.

EASY TO APPLY.

ASBESTOS

MINERS and MANUFACTURERS,
BRAIDED PACKING, MILL BOARD,
SHEATHING and SPECIALTIES.

CHALMERS-SPENCE CO., Foot of 8th St., N.Y.

34 S. Second Street, PHILADELPHIA.

WILLIAM TAYLOR & SONS,

COLUMBIAN IRON WORKS,

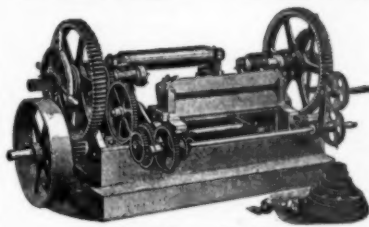
23 to 39 Adams Street, **BROOKLYN, N. Y.**

Oil Works Machinery,

HYDROSTATIC PRESSES,

Engines, Boilers, Castings, and Machine Making.

Veneer Cutting Machines,



Farrel-Veneer Machine.

ROTARY and UPRIGHT.

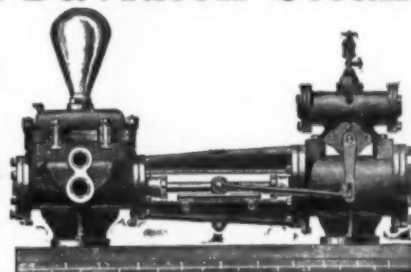
Best in the Market.

FARREL FOUNDRY & MACH. CO.

ANSONIA, CONN.

THE M. T. Davidson Steam Pump.

Simple,
EFFICIENT,
Reliable,
FOR ALL
PURPOSES
AND
DUTIES.



MADE IN
ALL SIZES,
WHETHER
SINGLE OR
Duplex.
ALSO
COMPOUND
Pumping
ENGINES.

DAVIDSON STEAM PUMP CO., 77 Liberty St., NEW YORK.

SACO WATER-POWER MACHINE SHOP,

—BIDDEFORD, MAINE,—

Manufacturers of

COTTON * MACHINERY

OF THE MOST IMPROVED PATTERNS.

CARDS,

Cylinders, 36x36 and 36x30, with 20 tops and Self-Strippers and Railway Troughs. Union Cards, with workers, strippers and tops.

FINISHER RAILWAY HEADS.

DRAWING FRAMES, ANY LENGTH, WITH 3, 4 AND 5 LINES OF STEEL ROLLERS.

English Slubbers and Fly Frames, With Long or Short Bolsters.

—**BOBBINS**— 12x6, 11x5½, 10x5, 9x4½, 8x4, 7x3½, 6x3, and 5x2½.

RING SPINNING FRAMES, 2, 4, 1½ AND 1½ INCH RINGS.

—TWISTERS.—

SELF-ACTING MULES, Parr, Sharp and Roberts' and Higgins' Pattern,

1½, 1 5-16, and 1½-inch Gauge.

S. W. RICHARDSON, Treasurer,

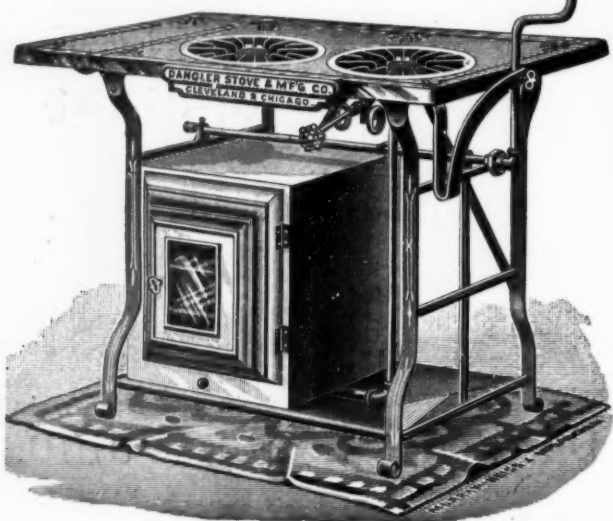
No. 1 Simmons Building, Boston.

JAS. H. McMULLAN, Agent,

Biddeford, Maine.

VAPOR AND OIL COOK STOVES.

THIS represents the Single Generator, Low Down Oven Stove, with Wrought Steel Frames, called the Two Burner Range.



For Labor Saving, Comfort and Economy, the **VAPOR COOK STOVES** stand unequalled, and fully Four Hundred Thousand Families throughout the United States bear willing testimony. As Pioneers in the Manufacture of these Stoves, years of experience have enabled us to add many and important improvements, until we have about reached perfection.

The High Character of Our Work
And the **SUPERIOR MERITS** of our Stoves are
Recognized Throughout the **WORLD.**

Dangler Vapor Cook Stove

Claims the Special Merit of having a **Simple, Strong, Powerful and Economical Burner**, and Mounted with Handsome Frames,—including the Wrought Steel Frame, Low Down Oven and Automatic Self Lighting Attachments, with all the Latest Improvements.



OUR LINE OF OIL STOVES AND RANGES

Is in all respects Equal to Anything in the Market, with all the Latest Improvements. We call Special Attention to our

EXCELSIOR OIL LAMP AND STOVES,

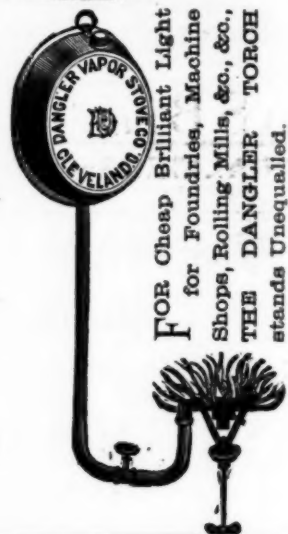
Single and Double, as the Leading Lamp Stove in the Market.

Vapor, Oil and Gasoline Torches,

Brilliant and Economical, for Lighting Large Manufacturing Establishments.

Please send for Catalogues and Circulars and for General Information to

The Dangler Stove & Mfg. Company,
CLEVELAND, OHIO.



FOR Cheap Brilliant Light
for Foundries, Machine
Shops, Rolling Mills, &c., &c.,
THE Dangler TORCH
stands Unequaled.

Wood Split Pulleys.
MILBURN
Gin & Machine Co.
MEMPHIS, TENN., U. S. A.

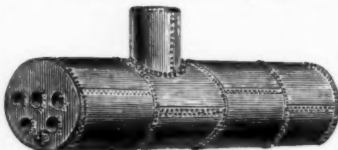
STEAM ENGINES, BOILERS,

(Made by the Tweedle System of Hydraulic Riveting),

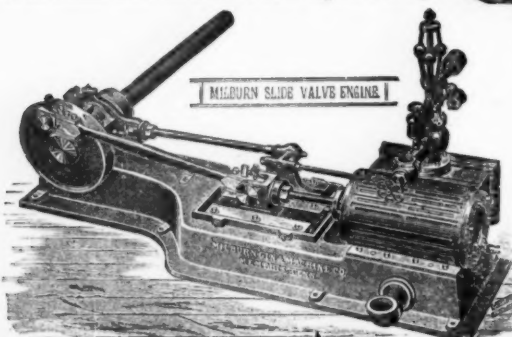
Cotton Gins, Gin Feeders and Condensers,

And the Celebrated "MILBURN" Wood Split Pulley, with Bushing System.

The best and lightest Pulley made. Every one guaranteed. Send for catalogue, testimonials and price-lists. We have the largest works of the kind in the world. Will send one of our Wood Split Pulleys



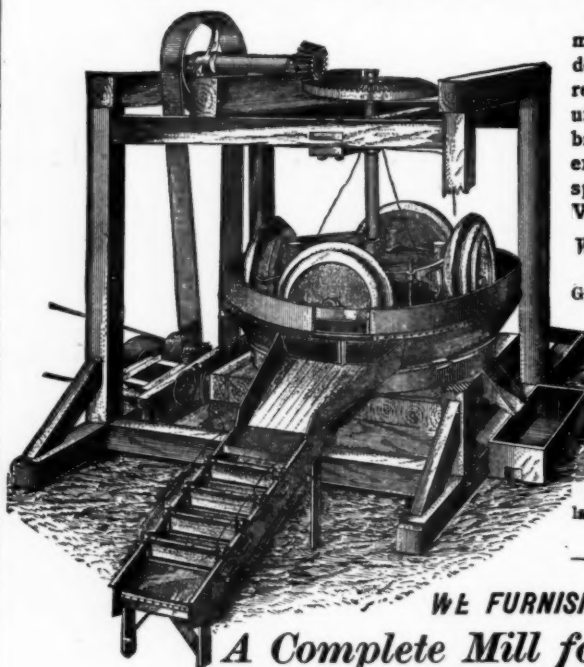
to any responsible party, for thirty days' trial, free of charge, if it fails to meet our warranty.



**Milburn Gin
& Machine Co.**

Send for Illustrated Circular and Price-List.

WISWELL Ore Pulverizer and Amalgamator COMBINED.



The following testimonial from Mr. Marsden, of the firm of Farrel & Marsden, manufacturers of stone-breakers & ore-crushers, Ansonia, Conn., speaks volumes for the Wiswell Mill:

Wiswell Electric Mining Machinery Co.:

GENTLEMEN: After carefully inspecting your mill and seeing it in operation, I do not hesitate to say that it is one of the best, if not the best pulverizer and most complete gold saving machine I have ever seen.

Please accept congratulations for your success.
S. L. MARSDEN.

WE FURNISH

A Complete Mill for \$2,500.

DELIVERED ON BOARD CARS.

For further information address

WISWELL
Electric Mining Machinery Company,

A. A. REEVE, Treas.

4 Post-Office Square, Boston, Mass.

HOWARD & BULLOUGH'S

OPENERS, LAPPERS, REVOLVING FLAT CARDS, ELECTRIC STOP MOTION DRAWING FRAMES, SLUBBING, INTERMEDIATE, ROVING AND FINE JACKS, (NEW PATTERNS 1886) ALL MADE BY TOOL WORK; EVERY PART EITHER TURNED, MILLED OR PLANED, AND CONTAINING MANY PATENTED AND VALUABLE IMPROVEMENTS. WARPERS, COPPER CYLINDER SLASHERS, (New Models.)

SOLE IMPORTERS,
RILEY & GRAY, - - BOSTON, MASS.
CARD CLOTHING, WOOLEN AND WORSTED MACHINERY, Etc., Etc.

The Whitin Machine Works

J. LASSELL, President and Treasurer

G. E. TAFT, Agent.

H. ELLIS, Superintendent.

MANUFACTURERS OF

COTTON MACHINERY

Openers, Lappers, Cards, Railway Heads, Drawing, Ring Spinning,

SPOOLERS, WET and DRY TWISTERS, REELS,

—WARPERS, DRESSERS, LOOMS, &c.,—

Whitinsville, Worcester County, MASS.

THE MEECH GOLD AND SILVER ORE

Disintegrating Machine

The Only Method for Preparing the Ore for Amalgamation.

Disintegrating, Decomposing and Desulphurizing the ore under a HIGH TEMPERATURE and PRESSURE OF STEAM HEAT, with chemical action and attrition, dissolves and breaks up the chemical combination in the ore, individualizing, cleaning and separating the atoms of metal from the gangue, perfectly freeing them for amalgamation in combination with the MEECH AMALGAMATION MACHINE and process, (being the greatest combination of Amalgamation known,) will successfully extract 90 per cent. of the metal from rebellious ores, such as Sulphurets, Sulphates, Sulphides, Chlorides, Bromides, Oxides, Tellurides, &c.

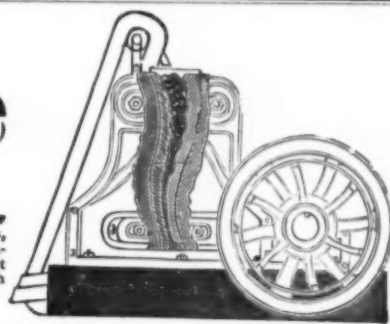
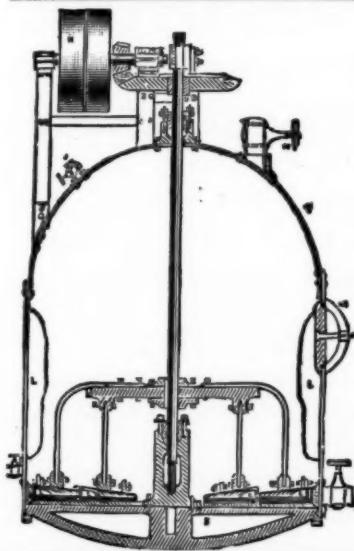
We desire business correspondents in every mining district in the United States.

THE MEECH CRUSHER & PULVERIZER.

This Machine will CRUSH AND PULVERIZE GOLD AND SILVER ORES to 20, 40, and 60 mesh fine, and from 20, 40 and 60 tons per day. The principles of this machine, making it superior to all others, are the peculiar concave and convex shape of the jaws, with concave and convex projections, which breaks, crumbles, stamps and pulverizes the ore with less power, wear and tear, than any other machine. MANUFACTURED BY

MEECH & CO., Cleveland, Ohio.

We will contract to erect the Meech Plant of Mining Machinery for successfully treating all grades of gold and silver ore



The WARFIELD MFG. CO.

336, 338, 340, 342 North Street, BALTIMORE, MD.

Manufacturers of **SPECIAL MACHINERY,**

Steam Engines, Shafting, Hangers, Pulleys, Couplings, Etc., Etc.

Sole Manufacturers of

Warfield's Green Corn Cutter,

Sole Manufacturers of

For Cutting Green Corn from the Cob for Canning.

The Most Complete Line of Patented Machinery for Fruit, Vegetable and Oyster Packers' use in the United States, and the Largest Manufacturers of the same. CATALOGUE UPON APPLICATION.

CHATTANOOGA FOUNDRY & PIPE WORKS.

DAVID GILES, Pres.

C. B. IBESTER, Vice-Prest.

M. LLEWELLYN, Secy. and Treas.

Successors to D. GILES & CO., Chattanooga, Tenn., Manufacturers of



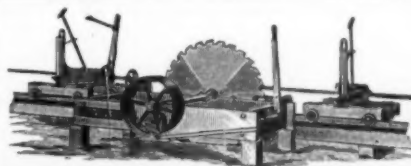
Also Castings and Patterns of Every Description made to order.

SPARGER'S White Heat Steel Welding Compound.

- It is superior to borax or anything else.
- It will weld steel to steel as easily as iron is welded to iron.
- It will restore steel when burned.
- It both welds and refines at the same time.
- It never misses welding when heated hot enough.
- It does not waste away steel as does borax and other compounds.

Any tool cracked in tempering can be welded by one application, and I positively guarantee that steel will not crack after it has been worked in the compound. Testimonials of its efficacy in hand from practical machinists in New York, Pittsburgh, Newark and other cities. Sold in bulk at 5 cents a pound. Address

W. A. SPARGER, Bristol, Tenn.



ENTERPRISE MFG CO.
COLUMBIANA, OHIO.

Buckeye Portable Saw Mills. Best and Cheapest Made.

Write for description and prices. It will pay you. Mention this paper.

Buy "THE NEW SOUTH." Handsomely Bound in Cloth. Price, . . . \$2.50

Manufacturers' Record Co., PUBLISHERS, BALTIMORE, Maryland.

The DEANE STEAM PUMP CO.

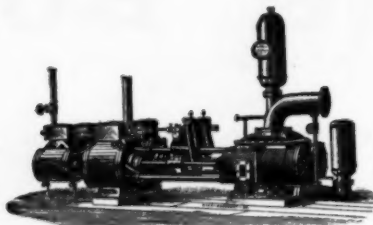
—HOLYOKE, [MASS.]—

BUILD

STEAM * PUMPING * MACHINERY

OF EVERY VARIETY.

Send for New Catalogue No. 22.



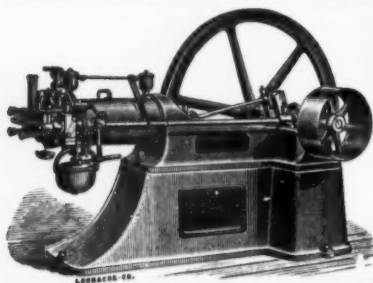
The DEANE STEAM PUMP CO.

NEW YORK, BOSTON,
CHICAGO, PHILADELPHIA, ST. LOUIS,

MAKE A SPECIALTY OF

Water Works **ENGINES**

FOR THE SUPPLY OF CITIES AND TOWNS.



Over 18,000 in Use.

Otto Gas Engine

20 to 70 per ct. less Gas consumption than ANY OTHER ENGINE.

Working Without Boiler, Steam, Coal, Ashes or Attendance.

Started instantly by a Match, it gives full power immediately. When stopped, all expense ceases.

Guaranteed to Consume 25 to 75 Per Cent. less Gas than any other Gas Engine Doing the Same Work.

No explosions, no fires nor cinders, no gauges, no pumps, no engineer or other attendant while running. Recommended by insurance companies. UNSURPASSED IN EVERY RESPECT for hoisting in warehouses, printing, ventilating, running small shops, &c. Sizes: 1 to 25-Horse power.

Branch Office, 130 Washington St., Chicago.

OTTO GAS ENGINE WORKS, Schleicher, Schumm & Co. 33d & WALNUT STS., PHILADELPHIA.

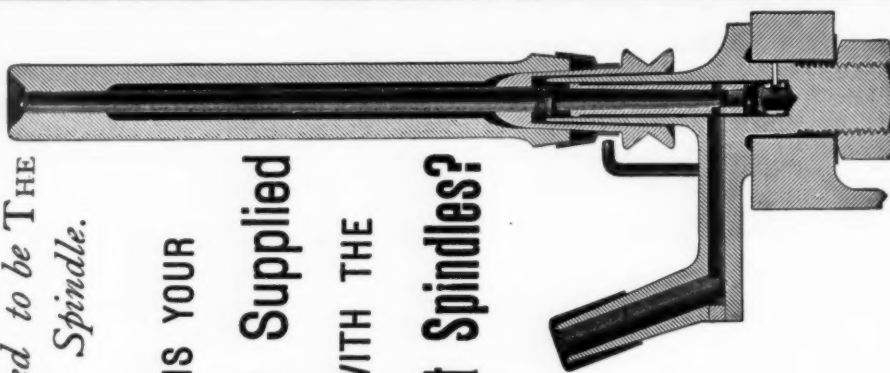
Since the Invention of
the Sawyer Spindle, the
most Popular Spindle has
proved to be THE
BEST Spindle.

IS YOUR

Mill Supplied

WITH THE

Best Spindles?



No. 49 RABBETH.

—THE—

NUMBER 49 RABBETH SPINDLE

Is undoubtedly the most economical
and Satisfactory Spindle in the mar-
ket for all ordinary numbers of yarns
IF YOU HAVE NOT SEEN IT
RUNNING, send for a sample.

GEO. DRAPER & SONS,
HOPEDALE, MASS.

Telegraph Address and Railroad Station,
MILFORD, MASS.



The 'SERCEANT' ROCK DRILL

Is More Simple in Construction, More Effective in Operation, and

REQUIRES LESS REPAIR

THAN THE BEST-KNOWN ROCK DRILLS IN THE MARKET.

We are Prepared to Prove the Above Statement.

AGENTS FOR THE NORWALK AIR COMPRESSOR.

Correspondence Solicited and Estimates Furnished for all Kinds of MACHINERY Required in MINING, QUARRYING or CONTRACT WORK.

ADDRESS,

Sergeant Drill Co., 16 Dey St., New York.

ALEXANDER BROWN & SONS, { ESTABLISHED 1811 } BALTIMORE. Transact a General Foreign and Domestic Banking Business.

Buy and sell Bills of Exchange on Great Britain, Ireland, and other foreign points. Issue Commercial and Travelers' Credits in Sterling, Francs or Dollars, available in any part of the world. Make Telegraphic Transfers of Money between this and other countries. Make Collections.

BROWN BROTHERS & CO., New York, Philadelphia and Boston.

tions of Drafts. Railroad, Municipal and other loans negotiated, and advances made on Cotton, Grain, Tobacco and other approved securities. Interest allowed on Deposits of Banks, Bankers, corporations and individuals. Members of Baltimore Stock Exchange. Buy and sell Stocks and Bonds in this and other cities. Private wire to Philadelphia and New York.

BROWN, SHIPLEY & CO., London and Liverpool.

BUY "THE NEW SOUTH."

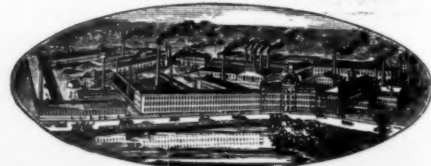
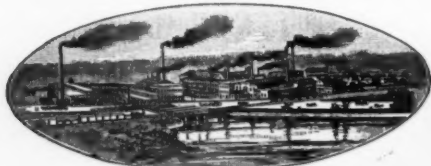
PRICE \$2.50.

HANDSOMELY BOUND IN CLOTH.

MANUFACTURERS RECORD CO., PUBLISHERS.

Washburn & Moen Mfg. Co., Worcester, Mass.

MANUFACTURERS OF



Iron, Steel and Copper Wire, Wire Rope, Barbed Wire.

NEW YORK WAREHOUSE, 16 Cliff Street.—

—CHICAGO WAREHOUSE, 107 Lake Street.

BALTIMORE Manufacturers' Record.

PUBLISHED EVERY SATURDAY BY THE
MANUFACTURERS' RECORD CO.

J. W. BIGSEY, *Pres.*
R. H. EDMONDS, *Treas.*
WM. H. EDMONDS, *Secy. & Manager.*

R. H. EDMONDS, EDITOR.

—OFFICE.—

71 and 73 Exchange Place, Cor. Commerce St.
—BALTIMORE.—

NEW YORK OFFICE:
Room 8, No. 118 Fulton Street.
SUBSCRIPTION \$3.00 A YEAR.

BALTIMORE, APRIL 2, 1887.

Our Quarterly Review of the South's Industrial Progress.

In presenting our regular quarterly review of the South's industrial progress, we desire to call especial attention to the fact that the utmost care has been exercised to make our figures as absolutely reliable as possible. In the compilation and revision of this report for the last three months, over 5,000 letters and postal cards have been used. The amount of work that this means cannot be appreciated except by those who have attempted some great statistical undertaking of this kind. We have spared neither labor nor expense in this work. Our aim is to give the actual facts and to avoid the slightest exaggeration, for the facts themselves are bewildering enough. As repeatedly stated, it must not be understood that the aggregate total of capital and capital stock means an actual cash investment of that amount, for many of the incorporated companies whose capital stock is included in our statistics will not invest as much cash as their stock calls for, and others may never carry out the objects for which they were organized. Making due allowance, however, for this, the figures which we give to-day, showing what the South did during the first three months of 1887 in increasing its industrial interests, are startling in their magnitude. They enable us to gain some idea of the marvelous change that is now being wrought out in that section.

THE publishers of one of our Southern exchanges write us regarding our book, "THE NEW SOUTH," as follows:

"Allow us to congratulate you upon your latest enterprise, and to express the hope that not only may 'THE NEW SOUTH' further the interests which was your intention for it, but also meet with such financial recognition as will to some extent reimburse you for your labor and expenditure in aid of the material interests of the South. We shall not fail to call attention to your work in our forthcoming edition, and to your admirably conceived mode of distributing the same, so as to bring it before the attention of just the very men whose advent to the South will be of the greatest benefit to her."

Statistics Needed.

One of the drawbacks of the period is that no man desiring to engage in any of the older manufacturing industries can ascertain whether there is room for another establishment. The only attainable information is that collected decennially by the census takers, but before that is collated and published conditions have changed, and in the two or three intervening years much has happened to impair the usefulness of those carefully prepared statistics. Nearly every new manufacturing enterprise must, in the nature of things, assume a risk and take its chances. What a blessing it would be if there was a central bureau of information whose statistics could be depended upon, that would give to the press monthly the same general facts about the chief manufactured products that are furnished the public about cotton, wheat, corn and other leading staples of commerce. If, in addition to these, the bureau should be required to give all information in its possession respecting any particular industry, then capitalists and enterprising men of small means could determine with reasonable certainty of being safe whether or not to embark in the enterprise they had under advisement. Some year or two since a national bureau of this kind was suggested in a letter to a New York paper by Hon. N. D. Sperry, a distinguished citizen of Connecticut. He agreed with Mr. Atkinson that there was then no general over-production in this country, but suggested that there might be at any time in the future, as there had been more than once in the past, and that the possibility of such a thing was a continual menace to the nation's prosperity. Because of this danger he urged that a governmental bureau be established at Washington that should serve the ends already mentioned. As the signal service wires its warnings of storms and the agricultural department its statistics of the condition of crops, so this bureau might keep the country informed of the condition of cotton, woolen, lumber, leather, iron, steel and other principal industries. There would be no insuperable difficulty in ascertaining the facts and putting them in shape for publication, and when they were thus scattered through the country they would operate to impair, if not to destroy, the power of monopolies, while at the same time affording a safe guide to men desiring to engage in manufacturing. Such a bureau as the Connecticut man proposed would, if managed in the spirit of the plan he had in mind, be of inestimable value to the South just now. Such a bureau would tell Smith how many saw mills were cutting persimmon and dogwood logs into blocks for shuttle blocks, and whether shuttle manufacturers got all the raw material needed, and whether the supply was equal to or beyond the demand. Jones, Brown and every other man

who cared to know could learn the same about tobacco factories, woolen and cotton mills, agricultural implements, and a host of other things too numerous for mention. Trade unions and commercial exchanges could not ascertain such facts; only the national government can. Congress did not see fit to act upon this recommendation, and it remains the dream of its talented and eminently practical originator. But another Congress may take this subject under advisement and eventually establish the desired bureau. When such a system shall have been in operation a few months the people will wonder how they ever managed to get along without it. The South will especially realize its benefits, for the facts it will furnish will be both a guide and a safeguard. There will then be no overcrowding of a few industries, but, on the contrary, many never before attempted will be started and prosecuted profitably. New fields of enterprise will be opened, and the South will then be able to present to its young men, too many of whom it now loses, such fine business opportunities that it will be able to keep them at home. In all ways the bureau of information planned by Mr. Sperry would be of advantage to the whole country, and of special benefit to the Southern States.

It is said that twenty-three new manufacturing enterprises have been organized at Decatur, Ala., within the last month or two. Many of them have already commenced work and others are getting into shape as rapidly as possible. Verily, Decatur is on the move. There seems to be no limit to the enterprise of the business men at the head of that town. A good illustration of this is given in the way they are making known the advantages of Decatur to the traveling public. Decatur is located on a through line of travel; it is an important stopping-place for meals for through passengers between the West and the South. Some five or six hundred people stop there every day for meals alone, and it is estimated that fully 2,000 travelers pass through the town every twenty hours. Knowing that travelers are always on the lookout for something to read, the Decatur Land & Improvement Co. have printed an immense number of pamphlets descriptive of the town, its resources and advantages, and one of these pamphlets is handed to every traveler passing through Decatur on the cars. In this way thousands of people from all over the country have the advantages of the town brought directly to their attention, and there are, of course, few travelers who do not read this pamphlet after it is handed to them. Many of them take it home and study it and then give it to their friends, and thus Decatur is reaping a harvest of untold industrial wealth through this little stroke of well-directed enterprise.

THE wonderful growth of Birmingham, Ala., is very strikingly illustrated in the increase in the assessed value of real estate from \$5,705,000 last year to \$20,000,000 this year.

Atlanta's Policy.

In one of the most practical of his economic essays Mr. Edward Atkinson took the position that there was no over-production in this country, but that the business ills charged to that account were really to be attributed to unequal distribution. This proposition was maintained by sundry and divers cogent arguments. Undoubtedly, as a general rule, Mr. Atkinson's position is sound, but, like every rule, it has exceptions, and these at present are many. Were distribution perfectly regulated these exceptions would still exist, for their first causes would not be changed. Over-production generally originates in ignorance or carelessness or the selfishness of trade. A manufacturer makes a certain line of goods that become popular and pay him a handsome profit. He pushes his production to the utmost, his competitors do the same, and finally the market is overstocked, and large amounts of capital are tied up in goods for which there is no demand. The strong houses take it as a thing of course and change their lines of production, while the weaker, because of their unavailable capital, are unable to work to advantage and begin to lose ground. The sagacious manager, whether merchant or manufacturer or farmer, goes at nothing hap-hazard. He studies the situation in all possible lights before he decides to venture, and thereafter he regulates his actions by well-defined principles and rules. Having decided that a certain article is needed, he estimates the probable extent of the demand, and whether there will be few or many to meet it. When these matters are settled to his satisfaction he goes ahead, and usually his venture is safe and profitable. The ignorant and careless lose where the sagacious man prospers, because they blindly follow his leading, knowing nothing of the limitations he has set to himself until too late to be of any avail. Let any who doubt this open their eyes to what is going on all around them. There has never been a time in this country when the danger of over-production in many manufacturing industries was greater than now, nor has there been one in which the prospect of a long season of prosperous business was more bright. The danger comes from men engaging in industries they do not understand and multiplying them to such an extent that supply will shortly exceed demand. Atlanta merchants, who rank among the shrewdest of their calling, have long foreseen this danger and endeavored to guard against it. Diversity is their watchword, and in all ways they labor to secure it. Every enterprise that will introduce a new industry they are ready to foster, for they know that those communities whose industries are greatly diversified are less liable to suffer in periods of business depression than those in which only one or two classes of goods are made. They know also that the greater the variety of industries the less the danger of over-production. The policy of Atlanta should be the policy of the South. Once adopted, and then persistently pursued, and the development of the present will be but as the earlier waves that betoken the coming of the flood tide.

FACTS AND FIGURES

That Tell of the South's Great Industrial Advance.

The Wonderful Increase in New Enterprises in 1887 as Compared with 1886.

The first three months of 1887 witnessed the most remarkable industrial activity in the South that the world has probably ever seen. From one end of the South to the other the people have awakened to the vast possibilities of the future of this land on which nature has bestowed her blessings with such a lavish hand. While capital from the North and West, and also from Europe, is pouring into the South, and the tide of immigration has turned this way, yet full credit should be given to the people of the South for their share in this great work of building up their country. In truth, Southern men and Southern money have led the way and demonstrated to the world that the South is not lacking in energy, nor are her people waiting for others to come in and develop her resources. While the South heartily invites the co-operation of outside capital and men in this great work, yet she is by no means dependent upon them for success in carrying out the gigantic enterprises that are attracting the attention of the business world. It is indeed wonderful to see the abundance of money in the South ready for investment in any enterprise that promises well.

The people of the West and the North, seeing the unequalled opportunities that the South now affords for engaging in manufactures, in mining, in railroad construction and in agriculture, are rapidly moving this way, and to-day the South and its great future are the almost universal themes of conversation. There is no longer any room, even in the most skeptical mind, for questioning the stability and permanency of the South's progress, and the almost unbounded prosperity which is opening upon that section. This prosperity has made itself felt first in manufactures and mining, but from these it is gradually spreading out to all other interests, and the swelling tide of men and money seeking openings for employment in the South is steadily enhancing the value of all real estate, and offering to the "land poor" farmers of the South opportunities for selling their idle land at profitable prices.

The rapid growth of many of the industrial centers of the South, and the consequent increase in the value of real estate, have led to the organization of many land companies and to a real estate speculation that have some elements of harm in them, though not so dangerous as many have supposed. In the majority of cases these land companies, while heavily capitalized, are based on something solid, having the development of the industrial interests as the main security of their future prosperity. Hence they have devoted much attention to the establishment of manufacturing enterprises, and thus, while enhancing the value of their own property, have been instrumental in helping their whole neighborhood. That the speculative mania has been encouraged too much in some cases, and the price of real estate forced up too rapidly here and there, is of course true, yet it must be remembered that speculation is, to a certain extent, at the foundation of all trade, and that where the developments have been so gigantic as in the South, it is impossible to prevent some over-trading. Moreover, the value of real estate throughout the South has been entirely too low, and there was great room for a very large legitimate advance in city and in country property.

Very many of the extensive industrial enterprises, now being built in the South or in process of formation, have been secured only through the work of the land companies, and while, as we have often said before, there is some danger of this land speculation leading to the floating of dishonest schemes that might injure the whole South, yet we believe the industrial prosperity of that section has now been placed on too solid a foundation to be seriously injured by such wild cat enterprises. It would be well, however, for the leaders in this industrial movement throughout the South to examine carefully into every scheme brought to their attention, that wherever fraud is detected it may be exposed. During the first three months of 1887 about 40 land companies, having an aggregate capital stock of \$45,000,000, were organized in the Southern States. These companies were formed in some instances to build new manufacturing and mining towns, but many of them were organized to develop the industries of old places. At Anniston, for instance, the Anniston City Land Co., organized with \$3,000,000 capital stock, based on the ownership of nearly 3,000 acres of land, the splendid Anniston Inn, electric light works, water works and other property, the actual value of which is largely in excess of the capital stock of this company, are devoting their attention to the building up of the manufactures of that city by offering liberal inducements for the establishment of such enterprises there, and it is estimated that the works already commenced since the formation of this company will add at least 10,000 or 12,000 to Anniston's population as soon as completed. This is the only way in which an aggregation of capital and real estate can be united in the direct work of securing new industries in any place, and it is this feature of the work of the land companies that makes them of great value to a town. In Decatur we find another apt illustration. Decatur for years remained practically a dead town, giving but few indications of its magnificent possibilities ever being realized. A few months ago a land company was organized there, with a capital stock of \$7,500,000, for the purpose of developing the manufactures of the place. In less than three months of work we find Decatur becoming a great industrial center, and manufactures, we might almost say by the dozen, preparing to locate there. Among the enterprises actually organized there since January 1st solely through the efforts of this land company are several iron furnaces, immense works for making steam pumps, engines, &c., a cotton compress, an ice factory, gas works, iron bridge works, electric light works, extensive bark extract works, said to be the largest when completed in the world, three or four brick-yards, &c. Many other illustrations similar to these of Anniston and Decatur could be given, but they will suffice to show our point.

When we turn to the actual industrial progress of the South during the first three months of 1887, as measured by the list of enterprises established or organized during that brief period, we cannot but be amazed at the stupendous work that has been accomplished. Nothing, we believe, in history will afford a parallel. Moreover, this growth is based on the most substantial foundation. It shows a diversity of industries that is extremely gratifying. While the iron and kindred interests continue to attract the largest share of attention, they are not, as some have supposed, being developed at the expense of other industries. The construction of furnaces is proceeding rapidly, and the output of Southern iron in 1888 will be very large. But the South, not content to make pig iron for some other section to make up into finished goods, is building foundries, machine shops, iron pipe works, agricultural implement factories, iron bridge

works, rolling mills and similar enterprises with a rapidity that assures a home market for a very large proportion, if not for the entire increase in the production of pig iron. The importance of this is thoroughly appreciated, and no sooner is a company organized to build a furnace than arrangements are made for establishing in the same place industries to use up the pig iron that the furnace will produce. At every iron town in the South—Birmingham, Anniston, Chattanooga, Decatur, Bessemer, South Pittsburg, &c.—we see the truth of this statement. In all other lines of manufacture as well as in iron great advancement is being made. The cotton mills are enlarging their capacity by adding machinery, while new mills are going up in many places, and this, destined to be one of the greatest of all Southern industries, is receiving more attention than for several years. In the manufacture of furniture; in the canning of fruits and vegetables, for which the South affords such splendid opportunities; in lumber interests, &c., there is the same rapid growth noticed as in the larger industries of iron and cotton.

A summary of all the new enterprises reported by us to-day as actually organized or chartered during the first three months of 1887, and excluding therefrom everything simply talked of or rumored, but not yet decided upon, shows the enormous number of 926 new concerns, in addition to which we give the names of about 200 that have been enlarged or been rebuilt after having been burned. These 926 new enterprises are divided as follows: Furnace companies, 17; machine shops and foundries, 31; miscellaneous iron works of large extent, (including a \$500,000 rolling mill, iron pipe concern to consume 300 tons of pig iron a day, tube works, axe and tool works, architectural iron works, &c.) 19; steel bloomeries, 2; mining and quarrying enterprises, 141; stove foundries, 2; cotton mill companies, 15; gas works, 15; electric light works, 17; water works, 22; ice factories, 35; cotton compresses, 9; canning factories, 22; furniture factories, 15; carriage and wagon factories, 12; shoe factories, 11; brick yards, 43; flour mills, 30; grist mills, 37; soap factories, 6; agricultural implement factories, 4; tobacco factories, 14; miscellaneous enterprises of many kinds, 217; and wood-working establishments, including sash and door factories, stove factories, planing mills, saw mills, shuttle block factories, &c., 189. There were also 110 railroad companies and 26 street railroad companies incorporated during the same period, and while many of them will probably never build their projected roads, yet a good proportion will do so; and the work of construction now under way on new lines and on the extensions and branches of old roads assure great activity in railroad building throughout the South during the balance of 1887.

Basing our calculations upon returns received directly by the MANUFACTURERS' RECORD, amply authenticated and verified, and in the case of incorporated companies, compared with the official reports of the State officers, we find that during the first 3 months of 1887 the amount of capital, including capital stock of incorporated companies, represented by the new manufacturing and mining enterprises organized or chartered at the South, and in the enlargement of old plants and rebuilding of mills that were destroyed by fire, not including the land companies organized to develop manufactures aggregates about \$85,000,000. It is of course true that with some of these companies the actual cash investment is not so large as the amount of their capital stock; but there are hundreds of small manufacturing enterprises, portable saw mills, small grist mills, gineries and similar small industries, costing from a few hundred to a thousand dollars, that are not included in this list. The aggregate cost of these

would be very considerable and *partly*, though not *wholly*, offset the too great capitalization of some incorporated companies. Moreover, many of the large land companies, which are not included in this list, will really invest quite heavily in manufactures by aiding others to establish new industries. In addition to these, every manufacturing enterprise is constantly adding here and there a new piece of machinery, which in the aggregate is very great; but we take no account of that, only including cases where a mill is greatly enlarged, remodeled, or other extensive improvements made.

Summing up the amount of capital and *capital stock* represented by our list of new enterprises, the enlargement of old plants and the rebuilding of mills after being burned, for the first three months of 1887, and comparing it with the corresponding time of 1886, we have:

	First three months of—	1886.
Alabama.....	\$19,784,000	\$ 3,345,500
Arkansas.....	8,940,000	6,110,000
Florida.....	405,000	485,000
Georgia.....	5,955,000	530,000
Kentucky.....	9,717,000	9,648,300
Louisiana.....	1,171,000	979,000
Maryland.....	8,810,000	2,215,000
Mississippi.....	1,738,000	135,000
North Carolina.....	2,195,000	715,200
South Carolina.....	460,000	90,000
Tennessee.....	13,188,000	2,324,000
Texas.....	3,566,000	1,991,000
Virginia.....	6,512,000	4,502,500
West Virginia.....	2,499,000	3,486,800
Southern Cotton Oil Co., incor- porated in New Jersey to build oil mills in the South.....	\$84,940,000	\$36,557,200
Total.....	\$89,940,000	\$36,557,200

As compared with the first three months of 1886, the list of new enterprises for the corresponding time of this year, and the aggregate of capital and capital stock shows a most astonishing increase. The capital and capital stock for the first three months of 1887 is more than double the amount for the same time last year. We give to-day a list of 926 new enterprises reported during January, February and March, while one year ago our list for the first quarter of 1886 showed only 445 new enterprises, the total this year in number as well as in investment being largely more than double for the same time 1886. Our list of new enterprises for the first three months of 1886 occupied but a little over one page of the MANUFACTURERS' RECORD; to-day the list for the first three months of 1887 occupies nearly three pages.

A comparison of the number of the principal kinds of industries established during the first three months of 1887 with the same time last year will show that there has been a uniformly rapid growth:

	First three months of—	1886.
	Number.	Number.
Machine shops and foundries.....	31	17
Iron furnace companies.....	17	4
Agricultural implement factories.....	4	4
Flour mills.....	30	18
Cotton mill companies.....	15	3
Furniture factories.....	15	7
Gas works.....	15	9
Water works.....	22	8
Carriage and wagon factories.....	12	12
Electric light companies.....	17	12
Mining enterprises.....	142	28
Lumber mills.....	189	110
Ice factories.....	35	19
Canning factories.....	23	1

In miscellaneous enterprises the increase has been equally as great as in the industries which we have named.

Is there not serious danger, we are sometimes asked, of the manufacturing business of the South, especially of iron, being overdone? Many people, it seems, are under this impression. They who think this way have failed to study the present condition of the South and its future prospects. It must be remembered that the South is a country of vast extent, of large population, and of elements of wealth that guarantee a large immigration. Owing to conditions too well understood to need discussion here, it was not until 1879 or 1880 that the industrial possibilities of the South commenced to attract much attention. Since then the development of these interests has gone on steadily, increasing in extent from year to year, until

we now see the wonderful progress recorded by the MANUFACTURERS' RECORD to-day. Even yet, however, a very large proportion of the manufactured goods—the iron, the hardware, the agricultural implements, the cotton and woolen goods and thousands of other things—consumed in the South are manufactured elsewhere. Were the population of the South to remain stationary and the purchasing power of its inhabitants not increased, it would still take some years, at the present rate of progress, before the South could produce enough manufactured goods to meet the consumption of that section. Instead of this, its population is rapidly increasing, while prosperity is becoming more general, thus in two ways steadily enlarging the consumptive demands of the South. To keep up with this increase in consumption will require a large increase in production over and above what would be necessary if the purchasing power remained stationary. Then when, after some years of rapid growth, the South is able to manufacture enough goods for its own wants, its facilities for cheap manufacturing will enable it to enter the markets of the North and the West, as well as many foreign countries, with such advantages as to insure a large business. There need be no fear of the South's industrial progress being too rapid for a good many years to come.

In the following list we give the name, location and character of business of the new enterprises organized during the three months ended March 31, 1887, and existing establishments rebuilt (after being burned) or enlarged, etc.:

ALABAMA.

LOCATION.	NAME.	BUSINESS.
Anniston.....	Woodstock Iron Co.....	Inc. Capital, Furnaces, &c.
Anniston.....	Anniston Pipe Works.....	Iron Pipe Works.
Anniston.....	Morrison Bros. & Co.....	Steel Blooming.
Anniston.....	Langley & Duke.....	Shoe Factory.
Anniston.....	Anniston Bottling Works.....	Bottling Works.
Anniston.....	Drewry Bros.....	Brick Works.
Anniston.....	Anniston Gas Works.....	Gas Works.
Anniston.....	Farrar & Leak.....	Brick Works.
Anniston.....	W. W. McAfee.....	Brick Works.
Anniston.....	Wm. Gatchell.....	Brick Works.
Anniston.....	James & D. Noble.....	Double Boiler Works.
Anniston.....	W. T. Farrar.....	Planing Mill.
Anniston.....	J. O. Cross.....	Shoe Factory.
Anniston.....	Murray & Stevenson.....	Enlarging Foundry.
Alabama.....	Shelby Coke, Iron & Steel Co.....	Iron and Steel.
Alabama.....	Wetumka & Coosa River	Manufacturing.
Alabama.....	Canal & Mfg. Co.....	Mining, &c.
Alabama.....	Sispy Valley Land, Min- ing & Imp. Co.....	Mining, &c.
Alabama.....	New South Iron & Steel Co.....	Manufacturing, &c.
Ashville.....	A. & A. W. Cox.....	Saw Mill.
Ashville.....	St. Clair Land & Imp. Co.....	Mining, &c.
Ashville.....	Pawnee Land & Mineral Co.....	Mining and Manufactg.
Ashville.....	D. E. Cason.....	Enlarge Tannery.
Athens.....	Black Bros.....	Brick Works.
Athens.....	N. Ala. Real Estate Iron	Manufacturing, &c.
Bessemer.....	Walter W. Davin.....	Terra Cotta Works.
Bessemer.....	Bessemer Rolling Mill Co.....	Rolling Mill.
Bessemer.....	Bessemer Mfg. Co.....	Sash and Door Factory.
Birmingham.....	Ala. Carriage & Wagon Co.....	Carriage & Wag. Factory.
Birmingham.....	Thompson Brick Co.....	Brick Works.
Birmingham.....	Birmingham Land & Tan- ning & Mfg. Co.....	Leather, Boots, &c.
Birmingham.....	Alabama Asphalt, Mining & Land Co.....	Asphalt.
Birmingham.....	Birmingham Axe & Tool Co.....	Axe & Tool Works.
Birmingham.....	Trammel & Co.....	Planing Mill.
Birmingham.....	East Birmingham Archi- tectural & Iron Co.....	Iron Works.
Birmingham.....	Birmingham Machine & Foundry Co.....	Machinery, Tools, &c.
Birmingham.....	Enterprise Mfg. Co.....	Saw Mill.
Birmingham.....	Peacock Coal, Iron & Imp.	Mining, &c.
Birmingham.....	Birmingham Iron Bridge & Forge Co.....	Bridge & Forge Works.
Birmingham.....	Birmingham Min. Paint Co.....	Paint Factory.
Birmingham.....	Muckenhout Bros.....	Planing Mill.
Birmingham.....	Aiken & Lighton.....	New Machine Works.
Birmingham.....	Birmingham Shoe Factory.....	Shoe Factory.
Birmingham.....	Nat. Gas & Oil Pros. Co.....	Bore for Gas.
Birmingham.....	H. A. Briggs & Co.....	New Sheet Iron Works.
Birmingham.....	Ala. Artificial Stone & Brick Co.....	Artificial Stone Works.
Birmingham.....	A. B. Chavols.....	Plan'g Mill & Sash Fac'y.
Birmingham.....	Southern Electrical Co.....	Electrical Apparatus.
Birmingham.....	E. Birmingham Iron Roof- ing & Corrugating Co.....	Roofing Works.
Birmingham.....	Southern Bridge Co.....	Boiler Works.
Birmingham.....	Birm. Gas & Illum. Co.....	Quadruple Works.
Birmingham.....	Central R. R. of Georgia.....	Machine Shops.
Birmingham.....	New Orleans & Ala. Coal & Coke Co.....	Mining and Manf.
Birmingham.....	J. C. Brandman & Co.....	Trunk Factory.
Birmingham.....	Elyton Land Co.....	Roundhouse & Mach. Shop
Birmingham.....	Anglo-Birm. Pottery Co.....	Pottery Works.
Birmingham.....	Ala. & Connellsville Coal & Coke Co.....	400 Coke Ovens, &c.
Birmingham.....	Birmingham Paint Mfg. Co.....	Paint Factory.
Birmingham.....	West End Rolling Mill Co.....	Rolling Mill.
Birmingham.....	N. Ala. Oil & Asphalt Co.....	Oil and Asphalt.
Birmingham.....	Enterprise Rolling Mill Co.....	Rolling Mill.
Birmingham.....	Birm. Cement Mfg. Co.....	Cement Works.
Birmingham.....	Birm. Ice Factory Co.....	Enlarge Ice Factory.
Birmingham.....	Highland Avenue & Belt R. R. Co.....	Machine Shops.
Birmingham.....	Birm. & Cahaba River Water Works Co.....	Water Works.
Brewton.....	Escambia Lumber Co.....	Saw Mill.
Middleton.....	W. D. McCarty.....	Saw Mill.
Calera.....	Calera Boot & Shoe Factory.....	Shoe Factory.
Calera.....	Calera Char. & Chem. Wks.....	400 Coke Ovens, Furn., &c.
Calera.....	Buckannon Boiler Works.....	Boiler Works.
Calera.....	Calera Handle Factory.....	Handle Factory.

LOCATION.	NAME.	BUSINESS.
Calera.....	Calera Brick Yards.....	Brick Yard.
Calera.....	Calera Foundry Co.....	Foundry.
Calera.....	Calera Land Co.....	Water Works.
Chunchula.....	M. L. Davis.....	Lumber Mill.
Clanton.....	J. W. Pritchett.....	Rice Mill.
Collinsville.....	Welbanks.....	Tannery.
Cullman.....	Cullman, Land & Imp. Co.....	Water Works.
Decatur.....	Decatur Mineral & Land Co.....	Mining, &c.
Decatur.....	Decatur Charcoal Chem. Co.....	Charcoal Furnaces, &c.
Decatur.....	Decatur Electric Light Co.....	Electric Light Works.
Decatur.....	Decatur Cotton Comp. Co.....	Cotton Compress.
Decatur.....	Ivens & Son Machinery Co.....	Machine Works.
Decatur.....	Decatur Oil & Gas Co.....	Natural Gas, &c.
Decatur.....	R. H. Whitman & Co.....	Brick Yard.
Decatur.....	Decatur Ice Co.....	Ice Factory.
Decatur.....	Decatur Brick Co.....	Brick Works.
Decatur.....	Dec. Iron Bridge Co. Co.....	Bridge Works.
Decatur.....	E. J. Oden.....	Gas Works.
Decatur.....	Oak Bark Extract Co.....	Bark Extract Works.
Decatur.....	Decatur Land, Improve- ment & Furnace Co.....	Furnaces, &c.
Decatur.....	Decatur Wheelbarrow Co.....	Wheelbarrows.
Decatur.....	Decatur.....	Planing Mill.
Demopolis.....	John C. Webb.....	Cotton Compress.
Eden.....	M. L. Maxwell.....	Planing Mill & Grist Mill.
Ensley.....	Ensley Mfg. & Imp. Co.....	Ice Factory.
Ensley.....	Ensley Mfg. & Imp. Co.....	Planing Mill.
Eufaula.....	Eufaula Water Co.....	Water Works.
Eufaula.....	Lumpkin.....	Saw Mill.
Farmville.....	Wiley Chambliss.....	Grist Mill.
Flor. Co.....	Stater & Co.....	Brick Yard.
Florence.....	Alabama Marble Co.....	Quarrying.
Florence.....	Glasgow.....	Brick Yard.
Florence.....	Florence Gas & Electric Light Co.....	Gas Works.
Florence.....	Florence Water Works Co.....	Water Works.
Florence.....	Flor. Coal, Coke & Iron Co.....	Canning Factory.
Florence.....	A. J. Dyas.....	Mining, Furnace, &c.
Florence.....	G. W. Swartz.....	Brick Works.
Florence.....	Florence Chemical, Coal & Iron Co.....	Planing and Shingle Mill.
Gadsden.....	Gadsden Ala. Furnace Co.....	Chem. Works & Iron Fur.
Gadsden.....	Gadsden Land & Imp. Co.....	Gas Works, &c.
Gadsden.....	Queen City Electric Lt. Co.....	Electric Light Works.
Gadsden.....	J. M. Chadwick.....	Ice Factory.
Garden City.....	Brick Yard.
Garden City.....	Flour Mill.
Hartselle.....	E. J. Oden.....	Saw Mill.
Hartselle.....	S. W. Shackelford.....	Wagon & Carriage Fact'y.
Hartselle.....	Bradley Bros.....	Saw and Grist Mill.
Hazen.....	J. W. Garrett.....	Saw & Grist Mill.
Hull.....	Smith Lumber Co.....	Saw Mill.
Jasper.....	C. C. Harris & Freeman.....	Saw Mill.
Larkinsville.....	W. R. Larkin.....	Gin.
Larkinsville.....	W. C. Stephens.....	Saw Mill.
Middleton.....	W. D. McCarty.....	Saw Mill.
Midway.....	McKinnon & Steater.....	Bucket & Broom Factory.
Mobile.....	Gage & Co.....	Ice Factory.
Mobile.....	March & Co.....	Ship Yard.
Mobile.....	Amer. Imp. Anti-Friction Co.....	Anti-Friction Metal.
Mobile.....	McIntosh Mill Co.....	Saw Mill.
Mobile.....	Mobile Dry Dock Co.....	Dry Dock.
Montgomery.....	The Lost Creek Coal & Mineral Land Co.....	Mining, &c.
Montgomery.....	Coleman & Reynolds.....	Horse-shoe Works.
Montgomery.....	Jagger-Townly Coal & Coke Co.....	Mining, &c.
Montgomery.....	Mon. Char. Fur. & Chem. Co.....	Charcoal Furnace.
Montgomery.....	Davis Bros.....	Brick Works.
Montgomery.....	Capital City Ice Factory.....	Ice Factory.
Mount Russell.....	Card & Cunningham.....	Saw Mill.
Oxana.....	A. C. Stuckey & Co.....	Bloomery.
Oxana.....	Oxana Stove Works.....	Stove Works.
Pollard.....	Escambia Lumber Co.....	Saw Mill.
Pratt Mines.....	Tenn. Coal, Iron & R. R. Co.....	500 Coke Ovens & 5 New Coal Mines.
Ragland.....	W. W. Price.....	Stone Quarry.
Refuge.....	J. B. Hall.....	Gin.
Renfro.....	D. W. Rogers & Co.....	Enlarge Planing Mill.
Robinson Spgs.....	McKithen & Splers.....	Saw Mill.
Scottsboro.....	Scottsboro R. R. Iron & Coal Co.....	Mining, &c.
Seddon.....	Jenkins & Leslie.....	Lathe Mill.
Selma.....	Wells & Co.....	Bottling Works.
Selma.....	Star Ice Co.....	Ice Factory.
Selma.....	J. Hayward.....	Planing Mill.
Selma.....	Selma Land, Imp. & Fur- nace Co.....	Furnaces, &c.
Selma.....	Canning & Son.....	Dou. Carriage & Wag. Fac.
Sheffield.....	A. J. Mullen.....	Doubt Brick Works.
Sheffield.....	Sheff. Land, Iron & Coal Co.....	Cotton Compress.
Sheffield.....	Sheffield Mfg. Co.....	Electric Light Works.
Sheffield.....	J. W. Carter.....	Enlarge Sash Factory.
Sheffield.....	Sheffield Ice Co.....	Machine Shop & Foundry.
Talladega.....	T. H. Nance.....	Ice Factory.
Talladega Falls.....	Talladega Falls Mfg. Co.....	Machine Shop.
Tuscaloosa.....	J. L. Maddox.....	Additional Machinery.
Tuscaloosa.....	Tuscaloosa Coal, Iron & Land Co.....	Brick Yard.
Tuscaloosa.....	Friedman Furnace Co.....	Mining, &c.
Tuscaloosa.....	Tuscaloosa & Castle Hill R. E. & Mfg. Co.....	Furnace.
Williams' Sta'n W. M. Carney.....	Manufacturing & Mining. Planing Mill.

ARKANSAS.

Bear.....	Lost Louisiana Mining Co.....	Smelter.
Bear.....	Smith Mining & Smelt. Co.....	Smelter.
Bear.....	E. P. Suydam Mining Co.....	Mining.
Bear.....	Bear Nat. Mining Co.....	Mining.
Bear.....	Beam Bros. & Thompson.....	Planing and Shingle Mill.
Booneville.....	Sylph Mining Co.....	Gold Mining.
Center Ridge.....	Robbins, Cross & Cleveland.....	Gold.
Dardanelle.....	Thomas Cox.....	Planing Mill.
Dumas.....	Greenville Barrel Co.....	Stave Factory.
Eureka Springs.....	Webb & Brown.....	Flour Mill.
Fayetteville.....	Switzer Wagon Co.....	Wagon Factory.
Fort Smith.....	Fort Smith Ice & Refrig- erator Mfg. Co.....	Ice Factory, &c.
Fort Smith.....	Fort Smith Canning Co.....	Canning Factory.
Fort Smith.....	J. G. Miller & Co.....	Enlarge Planing Mill.
Fort Smith, nr.....	Golden City Mining Co.....	Coal Mining.
Golden City.....	Emily Mining Co.....	Mining.
Hackett City.....	Kan. & Texas Coal Co.....	Coal Mining.
Hardy.....	Taylor Howard.....	Mining.
Hot Springs.....	E. Hogaboom.....	Electric Light Works.
Hot Springs.....	Anderson.....	Smelter.
Hot Springs.....	Ora Plata Min. & Devel. Co.....	Mining, &c.
Hot Springs.....	Accidental Ore Co.....	Mining.
Hot Springs.....	Hearn Lumber Co.....	Lumber Mills.
Hot Springs.....	American Mining Co.....	Smelter.
Hot Springs.....	Nonpareil Mining Co.....	Mining.
Judsonia.....	Judsonia Can. & Evap. Co.....	Canning Factory.
Kingsland.....	Davis & Son.....	Furniture Factory.
Little Rock.....	Wherry Mfg. Co.....	Electrical Instruments.
Little Rock.....	F. Roesch & Co.....	Enlarge Wagon Factory.
Little Rock.....	Ark. Water & Fire-Proof Paint Co.....	Paints.
Little Rock.....	Arkansas Water Co.....	Water Works.
Little Rock.....	Arkansas Pump & Pipe Co.....	Pumps, &c.
Little Rock.....	Mo. Pacific Railroad Co.....	Machine Shops.
Little Rock.....	Little Rock Timber Co.....	Lumber.
Little Rock.....	D. H. Thomas.....	Imp'd Cotton Press Fac'y.
Little Rock, nr.....	Alonso Hall.....	Slate Quarry.
Little Rock.....	Hancock Plow Co.....	Plow Factory.
Macon.....	Macdon Lumber Co.....	Lumber.
Mount'n Home.....	W. H. Sanford & Co.....	Wool Carding.
Mulberry.....	Kobel Bros.....	Grist Mill.
Newport.....	Newport Water Works Co.....	Gold Mining. Water Works.

NORTH CAROLINA.		
Abbotsbury	D. W. Thompson	Saw and Grist Mill.
Asheville	Asheville Gas Light Co.	Gas Works.
Asheville	Blue Ridge Lumber Co.	Sawing Mill.
Asheville	A. O. Ross	Ice Factory.
Asheville	C. E. Graham & Co.	Cotton Mill.
Ashe County		Iron Ore Mining.
Bandy	Wilson & Robinson	Saw Mill.
Blue Wing	Copper Mining & Mica Co.	Mining.
Blue Wing	W. Baker and others	Canning Factory.
Blue Wing	Copper Min. & Smelt. Co.	Mining, &c.
Buncombe Co.		Corundum Mining.
Charlotte	Point Gold Mining Co.	Mining.
Charlotte	Setzer & Carson	Handle Factory.
Charlotte	Charlotte Plow & Mch. Co.	Plow Works.
Charlotte	A-heville Lumber Co.	Saw Mill.
Connelly's Spgs.	McIntire, Warlick & Co.	Tobacco Factory.
Durham	R. J. Rogers	Marble Works.
Durham	Durham Cotton	Dye Factory.
Durham	Faucett Durham Tobacco	
Durham	" & Snuff Co.	Tobacco Factory.
Durham	Durham Gas Co.	Gas Works.
Edenton	Brown & Co.	Mill.
Fayetteville	Hope Mfg. Co.	Dye Fac. & En. Cot. Mill.
Fayetteville	Brush Electric Light & Power Co.	Electric Light Works.
Fayetteville	James D. McNeil	Cotton Mill.
Forest City	I. N. Biggestaff	Saw and Grist Mill.
Franklin	Mitchell & Jeffries	Tobacco Factory.
Jackson	J. B. Beal	Sash Factory.
Jacksonville	Clapp & Co.	Chair Factory.
Goldsboro	Goldsboro Water, Gas & Electric Light	Gas & Electric Light Wks.
Goldsboro	Mayor and City Council	Water Works.
Goldsboro	H. L. Grant	Blbld. Brick & Tile Wks.
Graham, near	E. S. Parker	Spoke & Shuttle Bl'k Fac.
Graham	Oneida Cotton Mills	Enlarged Cotton Mill.
Greensboro	Wm. Love	Enlarge Lumber Mill.
Greensboro	Brooks & Love	New Lumber Mill.
Gulf	North State Coal Co.	Coal Mining.
Henderson	Henderson Water Wks. Co.	Water Works.
Henderson	Hendson Gas & Elec. Lt. Co.	Gas & Electric Light Wks.
Hickory	A. Whittener & Son	Saw Mill.
High Point	Snow & Dalton	Enlarged Sash Factory.
High Point	Modern Barn Smoking Tobacco Co.	Tobacco Factory.
High Point	Empire Plaid Mills	Cotton Mill.
Hope Mills	Hope Mills Co.	Dye Factory.
Jopaleam	S. J. Tatam & Co.	Saw Mill.
Jopaleam	H. H. Swicegood & Co.	Saw Mill.
Leersville	James Keefer & Co.	Shuttle Block Factory.
Leersville	Huff & Stewart	Rugby Factory.
Lenoir	R. M. Conch	Grist Mill and Gin.
Lenoir	R. M. Conch	Lathe and Shingle Mill.
La Grange	J. S. Bizzell	Carriage & Wagon Fac'y.
Lenoir	Wesley Burnett	Gin.
Lenoir	Alexander J. Thompson	Cotton Mill.
Lenoir	James Boyle	Saw Mill.
Lenoir	A. D. Demson	Double Oil Mill.
North Carolina	Mumford Gold Mine	New Machinery.
North Carolina	Southern Bullion Co.	Mining.
North Carolina	K. C. Bullion Co.	Mining.
Rowan County	E. Terry	Saw Mill.
Rowan County	Nedwards Tobacco Co.	Doubled Tobacco Factory.
Rowan County	Granville Tobacco Co.	Tobacco Factory.
Rowan County, near	W. B. Crews	Mining.
Rowan County	W. J. Bullock	Saw Mill.
Rowan County	N. C. Millstone Co.	Saw Mill.
Rowan County	Gwyn Harper Mfg. Co.	Plaid Mill.
Rowan County	A. L. Beach & Co.	Apary Supplies.
Rowan County	Russell Mine	Stamp Mill.
Rowan County	Salem Water Supply Co.	Improved Works.
Rowan County	Salisbury Water Works Co.	Water Works.
Rowan County	P. H. Thompson	Foundry.
Rowan County	P. H. Thompson	Sash and Door Factory.
Rowan County	Miller, Blanton & Oates	Cotton Mill.
Rowan County	W. E. Turner & Hoke	Four-dry & Machine Shop.
Rowan County	J. Eglesfield	Brick Yard.
Rowan County	Samson Gold Mine	New Machinery.
Rowan County		Mining.
Rowan County	W. H. Jacobs	Saw Mill.
Rowan County	Howie Gold Mine	Stamp Mill.
Rowan County	Julius Anderson	Corn Mill.
Rowan County	John L. Royer Lumber Co.	Saw Mill.
Rowan County	W. Walling & Son	Saw & Planing Mill.
Rowan County	Clarke Whittier	Tobacco Factory.
Rowan County	Maverick Mills Co.	New Cotton Mill Mach'y.
Rowan County	Wilmingon Gas Co.	Improving Works.
Rowan County	Carolina Chemical Co.	Medicines & Extracts.
Rowan County		Electric Light Works.
Rowan County	R. Stevens & Co.	Furniture Factory.

LOCATION.	NAME.	BUSINESS.
bbeville.....	R. C. Thompson	Gold Mining.
harleston.....	A. S. Emerson	Shirt Factory.
harle-ton.....	Stoney Landing Co.....	Bridge Works.
harle-ton.....	Summerville Wood Co.....	New Works.
harle-ton.....	Charleston Gin Cylinder Co.....	Cotton Gins.
harle-ton.....	Bulls Bay Oyster Co.....	Oyster Planting.
olumbia.....	H. O. Kinsler	Saw Mill.
olumbia.....	United Gas Imp. Co.....	Improved Gas Works.
olumbia.....	M. A. arkley & Co.....	Enlarge Hosiery Mill.
olumbia.....	J. E. Turner	Can Factory.
astover.....	Stanly Mfg. Co.....	Pine Oil Factory.
disto Island.....	E. M. Whaley.....	Gin.
lendale.....	— Wi-weel.....	Gold Mining.
reenville.....	A. W. Holiday.....	Cotton-seed Mill.
reenville.....	Hugueno' Mills.....	Additional Machinery.
reenwood.....	J. H. Oldham	Tinners.
xington.....	D. E. Bird	Mill.
arl.....	McCray & McRay.....	Mill.
angeburg.....	P. F. Gramling.....	Saw & Planing& Gist Mill
ort Royal.....	J. I. Cummings.....	Planing Mill.
ort Royal.....	Baldwin Fertilizer Co.....	Fertilizer Works.
embert.....	C. R. Kells.....	Saw Mill.
artauburg.....	D. C. C nverse and o'ters.....	Shash & Door Factory.
unter.....	Sumter Cotton Mills.....	New Machinery.

Alamo.....	F. Robertson and others.....	Flour Mill.
Athens.....	L. B. Caldwell.....	Marble Quarry.
Athens.....	F. B. McElwee, Supt.....	Cotton Mill.
Athens.....	Tenn. Min. Land & Imp. Co.....	Water Works.
Birchwood.....	J. F. Cornard.....	Mill.
Bloomington.....	J. F. Cornard.....	Tobacco Factory.
Brayton.....	Combs & Roberts.....	Saw and Shingle Mill.
Bristol.....	T. F. Wood.....	Remodel Flour Mill.
Bristol.....	Gas Works.
Bristol.....	Doriot & Webb.....	Brick Works.
Bristol.....	John McCrowell.....	Brick Works.
Bristol.....	Holston Packing Co.....	Canning Factory.
Bristol.....	J. H. Buffum.....	Planing Mill.
Bristol.....	D. J. Elliot.....	Machine Shop.
Buzzard Roost.....	A. A. Walker.....	Saw Mill.
Brownsville.....	L. & D. N. Richardson.....	Saw Mill.
Brownsville.....	Richard Mann.....	Grist and Saw Mill.
Brownsville.....	F. P. & T. O. Bond.....	Grist Mill and Cotton Gin.
Brownsville.....	Kerely & Morelock.....	Grist Mill and Cotton Gin.
Camden.....	Stave Factory.
Chattanooga.....	Mehan & Scott.....	Foundry & Steam Forge.
Chattanooga.....	W. B. Seymour & Co.....	New Saw Mill, &c.
Chattanooga.....	South Tredegar Iron Co.....	New Machinery.
Chattanooga.....	Chat. Split Wood. Pulley Co.....	Wood Pulleys.
Chattanooga.....	Chattanooga Gas Light Co.....	Double Works.
Chattanooga.....	Loomis & Hart Mfg. Co.....	Lumber Mill.
Chattanooga.....	Stivers, Woodburn & Co.....	New Planing Mill.
Chattanooga.....	Southern Horse Shoe & Iron Co.....	Horse Shoe Works.
Chattanooga.....	Brush Electric Light Co.....	To enlarge Works.
Chattanooga.....	Stivers, Woodburn & Co.....	New Planing Mill.
Chattanooga.....	T. J. Laitner & Co.....	Tack Factory.
Chattanooga.....	Ruoh Cotton Mill.....	New Machinery.
Chattanooga.....	Chatta. Car & Fdy. Co.....	Foundry & Car Works.
Chattanooga.....	Consolidated & Iron.....	Mining.
Chattanooga.....	Farmers' Friend Fence Ma.....	Fence Works.
Chattanooga.....	chine Co.....	Double Fire-Brick Works.
Chattanooga.....	Montague & Co.....	Tar Distillery.
Chattanooga.....	W. H. Adams.....	Additional Machinery.
Chattanooga.....	Duncan, Pyott & Co.....	Double Works.
Chattanooga.....	Chattanooga Gas Light Co.....	Natural Gas.
Chattanooga.....	Tenn. & Ala. Oil & Gas Co.....	Gas Economizers.
Chattanooga.....	The Standard Gas Mche. Co.....	Marble Qu. rry.
Choptack.....	J. H. Price Co.....	Planing Mill.
Clarksville.....	W. A. Settle.....	Sash and Door Factory.
Cleveland.....	S. W. Marshall & Co.....	Grist Mill.
Cleveland.....	A. J. Berryhill.....	Lumber Mill.
Columbia.....	Columb a Lumber Co.....	Remodel Flour Mill.
Columbia.....	John Ashton.....	Pork-Packing House.
Crockett's Mill.....	Daniel Rudy and others.....	Flour Mill.
Daisy.....	F. Robertson and others.....	Flour Mill.
Dayton.....	Daisy Coal Co.....	Flour Mill.
Dayton.....	Nelson, Buchanan & Co.....	Flour Mill.
Dayton.....	Snow Bros. & Harding.....	Flour Mill.
Dayton.....	Allen & Kirsh.....	Shingle Mill.
Dayton.....	Hall & Reynolds.....	Broom Factory.
Dayton.....	Gilbreath & Purchase.....	Tobacco Factory.
Dresden.....	R. N. Irvine.....	Marble Quarry.
Ebenezer.....	Stamp, Woods & Co.....	Saw Mill & Stave Factory.
Erin.....	McGregor, Hege & Co.....	Flour Mill & Cotton Mill.
Fayetteville.....	Elk River Wool & Flouring Mill & Mfg. Co.....	Marble Quarrying.
Fayetteville.....	R. L. Bright.....	Marble Quarry.
Goodlettsville.....	Reilly Bros.....	Wool Carding Mill.
Huntington.....	J. B. Drill.....	Car Couplers.
Jackson.....	Safety Car Coupler Ass'n.....	Sash and Cora Mill.
Jackson.....	S. R. Conger.....	Planing Mill.
Jackson.....	L. L. White.....	Mining, &c.
Jasper.....	Pine Mountain Coal, Iron, & Land, R. & R. Mfg. Co.....	Tannery.
Jellico.....	Hosiery Factory.
Johnson City.....	A. J. King and others.....	Enlarge Factory.
Johnson City.....	Johnson City Furniture Co.....	Marble Quarrying.
Kelso.....	Bryson, Francis & Co.....	Saw Mill.
Key.....	O. I. Luce.....	New Wagon Factory.
Knoxville.....	S. T. Post & Son.....	Enlarge Saw Mill.
Knoxville.....	D. M. Rose & Co.....	Saw & Planing Mill.
Knoxville.....	Unaka Lumber Co.....	Harness & Shoe Factory.
Knoxville.....	Smith, Ramsey & Co.....	Additional Machinery.
Knoxville.....	Brooksidge Cotton Mill.....	Sash & Door Factory.
Knoxville.....	Frank Hughes.....	Manufacturing, &c.
Knoxville.....	Powell Land & Kaolin Co.....	Shoe Factory.
Knoxville.....	Wm. Crigg.....	Ice Factory.
Knoxville.....	Crystal Ice Co.....	Natural Gas.
Knoxville.....	R. Z. Roberts.....	Improved Flour Mill.
Knoxville.....	Knoxville Flouring Mills.....	Timber, &c.
Knoxville.....	East Tenn. Consolidation.....	Zinc Mining.
Knoxville.....	Timber & Boom Co.....	Pottery and Brick Works.
Leadvale.....	Bertha Zinc Co.....	Machine Shop.
Loudon.....	J. F. Bell.....	Flour Mill.
Maryville.....	T. P. Cowan & Co.....	Sash & Door Factory.
Maryville.....	Maryville City Mills Co.....	Churn Factory.
Maryville.....	Boyd & Hufstetter.....	Gold Mining.
Maryville.....	Wm. Colbert.....	Remodel Mill.
McMinnville.....	Falcon Mill Co.....	Refitted Cotton Mill.
McMinnville.....	Annis Cotton Mills.....	Clothing Factory.
Memphis.....	Eureka Mfg. Co.....	Vinegar Works.
Memphis.....	Mem. Cider & Vinegar Co.....	Tire Factory.
Memphis.....	H. Wetter Mfg. Co.....	Mining.
Memphis.....	Consolidated M. & Mfg. Co.....	Two Cotton Compresses.
Memphis.....	Mem. Comp. & Storage Co.....	Candy Factory.
Memphis.....	Peters & Co.....	Enlarged Stove Works.
Memphis.....	Bluff City Stove Works.....	Iron, Coal Mining, &c.
Memphis.....	Brownson & Cedar Creek Iron Mfg. Co.....	New Ice Factory.
Memphis.....	Bohlen-Huse Mch. & Lake Ice Co.....	Manufacturing.
Memphis.....	Cot., Wool, Lum. & Mfg. Co.....	Manufacturing.
Memphis.....	Memphis Lumber & Mfg. Co.....	Broom Factory.
Milan.....	W. G. Harrison.....	Stove Foundry.
Morristown.....	C. R. Johnson.....	Agricultural Imp. Fac.
Morristown.....	A. H. Greer.....	Wire Fence Factory.
Mossy Creek.....	W. S. Sizs & Co.....	Two Furnaces, &c.
Nashville.....	Nashville Steel, Iron & Charcoal Co.....	Creamery, &c.
Nashville.....	Robin Jones Creamery & Dairy Co.....	Mining, &c.
Nashville.....	Laurel Hill Mfg. & Napier Iron & Railway Co.....	Railway Apparatus.
Nashville.....	Webb Mfg. Co.....	Mustards, &c.
Nashville.....	Fulcher & Dyas Brick Co.....	Brick Works.
Nashville.....	Pine Mountain Coal, Iron, & Land, R. & R. Mfg. Co.....	Mining, &c.

Nashville.....	National Mfg. Co.....	Dye Works.
Nashville.....	Nashville Burial Case Co.....	Burial Case Factory.
Nashville.....	Rangum Root Medicine Co.....	Medicines, &c.
Nashville.....	Pennock Battery Electric Light Co.....	Electric Light Works.
Nashville.....	Wayne Iron Co.....	Furnaces, &c.
Nashville.....		Lumber Factory.
Nashville.....	South. Gaslight & Econ. Co.....	Gas Economizers.
Nashville.....	Tenn. Range & Mfg. Co.....	†New Shop.
Nashville.....	Nashville Iron Co.....	Additional Machinery.
Nashville.....	Timmons Mill Co.....	Flour and Grist Mill.
Nashville.....	Nash. Iron, Steel & Char. Co.....	Charcoal Furnaces, &c.
West Nashville.....		Horseshoe Factory.
Ooltewah.....	Ooltewah Lime Co.....	Lime Works.
Philadelphia.....	A. Cook.....	Flor. Mill.
Piscon.....	Stewart & Alexander.....	Pottery.
Union.....	Troutwine & Semones.....	Foundry.
Rockwood.....	L. M. Walsh.....	Corn Mill.
Rogersville.....	John J. Wolf.....	Saw Mill.
Santa Fe.....	Polk, Ashton & Rose.....	Saw Mill.
Savannah.....	Broyle & Bennett.....	Steam Mill.
Sevierville.....	Sevierville Lumber Co.....	†Planing Mill.
Sewanee.....	Denny & Maddox.....	Sandstone Quarry.
Sewanee.....	Dennedy & Maddox.....	Stone Quarry.
Shelbyville.....	Victor Mills.....	Electric Light Works.
Shelbyville.....		Sash & Door Factory.
Sheswood.....	Hibbard & Morse.....	Stave Factory & Saw Mill.
South Pittsburg.....	A. T. Patton & Co.....	Brick Yard.
South Pittsburg.....	Squatchie Hoe & Tool Co.....	Hoe and Tool Factory.
S. Pittsburg.....	Battle Creek Brick Co.....	Brick Yard.
Sparta, near.....	Bon Air Coal Co.....	150 Coke Ovens.
Sparta.....	O. I. Lull.....	Saw Mill.
Spring City.....	Spring City Knitting Co.....	Knitting Factory.
Spartury Pls.....	Brook Bros.....	Gravel Quarry.
Stribling.....	Grange Furnace Co.....	Improving Furnace.
Sweetwater.....	Gillette & Straudley.....	Saw Mill.
Tennessee City.....		Planing Mill.
Tennessee City.....		Brick Yard.
Trenton.....	Lookout Val. Iron & Coal Co.....	Mining and Manf.
Tullahoma.....	Caney Fork Iron & Coal Co.....	Mining, &c.
Tullahoma.....	Raht Bros.....	Flour Mill.
Tullahoma.....	Caney Fork Iron & Coal Co.....	Mining, &c.
Virthe.....	J. B. Boyd.....	Marble Quarrying.
White Pine.....	T. W. Fain.....	Grist Mill.
Whitesburg.....	Stamps-Star Marble Co.....	Marble Quarrying.
Whitwell.....	Tenn. Coal, Iron & R. R. Co.....	200 Coke Ovens & Min'g.

Altavado	Jefferson Lumber Co.	Coal Mining.
Austin	Uphaw Lumber Co.	Saw Mill.
Austin	Lone Star Ice Works.	Lumber Mills.
Bertram	C. Dorbran t.	Enlarged Ice Factory.
Brenham	Brenham Oil Mill	Rope Factory.
Brownwood	Brownwood Ice Factory	New Soap Factory.
Boerne	Richard Crocker	Ice Factory.
Bowie	Heber Stone Co.	Ice Factory.
Burnet	Johnson	Coal Mining.
Burnet	Texas Mining & Imp. Co.	Marble Quarry.
Burnet	A. R. Johnson and others.	Mining, &c.
Cleburne	J. W. Day & Co.	Ice Factory.
Cleburne	Cleburne Gas Light Co.	Ice Factory.
Cleburne	G. Graham & Co.	Gas Works.
Coleman	W. C. Dibrell, Prest.	Coal Mining.
Coleman	Coleman Prospecting Co.	Coal Mining.
Colorado	Lone Star Salt Co.	Enlarged Works.
Corsicana	Winship Mfg. Co.	Gun Factory.
Corsicana	F. W. Caruth.	Sash and Door Factory.
Dallas	W. A. Crowdis & H. M. Sutton.	Electric Light Works.
Dallas	Excelsior Soap Factory	Soap Factory.
Dallas	East Dallas Water Wks. Co.	Increased Capital.
Denison	Denison Crystal Ice Co.	Refrigerating Works.
El Paso	El Paso Ice & Refrig. Co.	Ice Factory, &c.
Fort Worth	Dahlman Refrigerator Co.	Refrigerator Works.
Fort Worth	Texas Telephone, Light & Power Co.	Manufacturing.
Fort Worth	Bailey & Knight.	Horse-collar Factory.
Fredericksburg	John Keifer.	Ice Factory.
Gainesville	Gainesville Compress & Forwarding Co.	Cotton Compress.
Gainesville	J. B. Wells and others.	Grain Elevator.
Galveston	Lone Star Cracker Co.	Cracker Factory.
Gilmer	East & West Texas Lumber Co.	Lumber Mills.
Georgetown	Central Texas Co operative Mfg. Co.	Cotton Mill.
Gordon	Johnson Bros.	Coal Mining.
Gordon	Gordon Coal Min. & Oil Co.	Coal Mining.
Greenville	M. P. Kelly & Co.	Water Works.
Headsville	Pioneer Iron & Coal Co.	Coal Mining.
Houston	Central Ice Mfg. Co.	Flour Mill.
Houston	Noble Nut, Lock & Washer Co.	Ice Factory.
Houston		Nuts, &c.
Houston		Reef Can. & Refrig. Works
Houston	Southern Brewage Co.	Cotton seed Oil Mill.
Houston	Bridgeport Brewing Co.	Brewery.
Jefferson	Jefferson Ice Co.	Ice Factory.
Kaufman	Haney.	Mill and Gin.
Kaufman	Freeman & Peede.	Flour Mill.
Kemp	J. H. Friedly.	Flour Mill.
Kildare	Dunn & Wurtsbaugh.	Saw Mill.
Longview	A. A. Killingsworth.	Ginnery.
Marshall		Water Works.
Marshall, near	M. McPhail.	Saw Mill.
Marshall, near	M. H. Carter.	Saw Mill.
Mason		Silver and Lead Mine.
Medina County	Geo. H. Kaleyser.	Coal Mining.
Midlothian		Flour Mill.
Navasota	J. Brooks.	Sash & Door Factory.
Navasota	Farmers' Alliance.	Cotton Factory.
Paris	J. W. Rodgers.	Furniture Factory.
Paris	M. Laughlin.	Flour Mill.
Pearland	Pearall Mill Co.	Flour Mill.
Pecos City	Pecos City Water Co.	Water Works.
Pecos City	Murphy.	Flour Mill.
Pilot Point	Pilot Point Roller Mill Co.	Flour Mill.
Plank	Middlebrook Bros.	Saw and Planing Mill.
Plano	John T. Frederick & others.	Flour Mill.
San Antonio	San Antonio Brewing Co.	Improved Brewery.
San Antonio	Hammond-Sutton Electric Light & Power Co.	Electric Light Works.
San Antonio	Alamo Cement Co.	Enlarged Works.
San Antonio	San Antonio Oil Works.	Enlarged Mill.
San Antonio	Southern Mfg. Co.	Extracts, Spices, &c.
San Antonio	Adams Mill Co.	
San Diego	Frank Gueydian.	Ginnery.
Santa Anna	Harrison Coal Prospect Co.	Coal Mining.
Taylor	Mayor and City Council.	Gas Works.
Taylor	J. K. McCormick.	Ice Factory.
Taylor	E. K. McCormick.	Country.
Temple	Farmers' Alliance.	Cotton Mill.
Texarkana	Texarkana Machinery Co.	Machine Works.
Trenton		Flour Mill.
Tyler	Yoakum & Williams and others.	Canning Factory.
Tyler	Tyler Lumber Co.	Planing Mill.
Uvalde	Texas Guano Co.	Fertilizer Works.
Waco	Miller Hub Mfg. Co.	Hubs, &c.
Waco	Waco Cotton Mills.	New Machinery.
Wichita Falls	Wichita Coal Co.	Coal Mining.
Wills' Point	Will's Point Canning Co.	Canning Factory.

Alexandria.....	Arrow Steamship Co.....	Ship Yard.
Amsterdam.....	C. M. Nalls.	Canning Factory.
Botetourt Co.....	Deisher.....	Saw & Bark Mill.
Botetourt Co.....	Geo. T. Sifford.....	Lime Works.
Buffordville.....	Mrs. Jane Hall.....	Flour Mill.
Chase City.....	Chase City Tobacco Co.....	Tobacco Factory.
Christiansburg.....	A. M. Kasey.....	Tobacco Factory.
Churchwood.....	Brush Mountain Coal Co.....	Coal Mining.

Clarksville	T. E. Hicks	Tobacco Factory.
Clarksville	F. J. Lupfert	Furniture Factory.
Clarksville	F. J. Lupfert	Corn Mill.
Crigersville	Harri-brug Handle Co.	Handle Factory.
Crockett	Wythe Speedwell Iron	Improved Furnace.
	Minig & Mfg. Co.	
Culpeper	Ash Harman	Granite Quarrying.
Danville	Mayor and City Council.	Gas Works.
Danville	Morotock Cotton Mill	Enlarged Mill.
Danville	Riverside Cotton Mills	Second Cotton Mill.
Dublin	Dublin Roller Mill Co.	Flour Mill.
Estellville, near	John J. Wolfe	Saw Mill.
Farmville	Farmville Water Co.	Water Works.
Greenville	Jacob Bear	Manganese & Mining.
Greenville	Best	Iron Ore Mining.
Kernstown	L. E. Savage	Enlarged Distillery.
Koiler's	Store, near	Potts & Morris
		Manganese Mining.
Laird	Marks & Laird	Ore Mining.
Liberty		Foundry & Machine Shop.
Liscomb	James K. Kerr	Manganese Mining.
Lithia		Canning Factory.
Lovely Mount	Central Mfg. & Imp. Co.	Brick Works.
Lovely Mount	Central Mfg. & Imp. Co.	Wooden-ware Factory.
Lynchburg	Glamorgan Iron Works	Reorganized.
	Lynchburg Co-operative	Broom Factory.
	Brush & Broom Factory ..	
Lynchburg	Va. Nail & Iron Works Co.	Furnace.
Martinsville	New South Cigar Works	Cigar Factory.
Middleburg	Va. Marble Co.	Reorganized.
Midvale	J. K. Kerr	Manganese Mining.
Morrisonsville	T. J. Fall	Saw Mill.
New Orleans	A. S. Armstrong	Moss Factory.
New Store	W. E. Gilliam	Gold Mining.
Norfolk	U. S. Navy Department	Dry Dock.
Norfolk	Independent Auto. Porta-	Gas Works.
	ble Gas Works	
Obenshain	M. D. Obenshain	Handle & Spoke Fac., &c.
Petersburg	Petersburg Crystal Ice Co.	Ice Factory.
Petersburg	David Dunlop	Tobacco Factory.
Poages	J. Hayes	Tannery.
Pocahontas, nr.	Marshall & Goodwill	Coal Mining.
Portsmouth		Electric Light Works.
Portsmouth	L. K. Kyslop	Bottling Works.
Pulaski City	Nicholson & Teany	Brick Yard.
Pulaski City	W. Seagle & Bro.	Furniture Factory.
Raphine	B. C. Rawlings and others.	Creamery.
Richmond	The Tredegar Co.	Additional Machinery.
Richmond	Progress Electric Light Co.	Electric Lights.
Richmond	N. V. Randolph and others.	Glass Factory.
Richmond	Sully Car Seal Lock Co.	Increased Capital.
Richmond	Richmond Shoddy Factory	Factory.
Richmond	Co-Opera. Cloth. Mfg. Co.	Clothing Factory.
Richmond	Electric, Gas Lt. & Com. Co.	Gas Works, &c.
Richmond	Richmond Paper Mfg. Co.	Paper Mill.
Richmond	Old Dominion Electric Lt.	Electric Light Works.
	& Power Co.	
Richmond	N. C. Coach Material Co.	Coach Material Works.
Richmond	Albemarle Paper Mfg. Co.	Paper Mill.
Roanoke	Roanoke Creamery Co.	Creamery.
Roanoke	J. V. Simmons & Kersley	Ice Factory.
Roanoke	Koanoke Mfg. Co.	Flour Mill, &c.
Roanoke	Walter P. Huff & Co.	Planing Mill.
Salem	Hockman & Duval	Doubled Saw Mill.
Salem	Preston, Evans & Co.	Canning Factory.
Salem	Camden Iron Works	Warped Iron Works.
Saltsville	Jerisha Zinc Co.	New Furnaces.
Sheppard's	W. E. Gilliam	Gold Mining.
Sherando	O'Hearn	Manganese Mining.
Sherando, near	Jacob Wissler and others.	Manganese Mining.
Slate Mills	J. M. Taylor	Remodeled Flour Mill.
Snowville	Isaac Slenker	Flour Mill.
South Boston	James M. Carrington	Tobacco Factory.
Speedwell	Wythe Speedwell Iron	Improved Furnace.
	Minig & Mfg. Co.	
Speedwell	Wythe Speedwell Iron	Flour Mill.
	Minig & Mfg. Co.	
Spring Grove	Johnson & Rittenhouse	Sorghum Factory.
Staunton	John P. Schlocker	Sausage Factory.
Staunton	Hale Pavement Co.	Wearing Materials.
Stevensburgh	E. B. Burton	Wagon & Carriage Facy.
Stonewall	Parkins, Jordan & Parkins	Creamery.
Suffolk	Nansemond Shingle Co.	Shingle Mill.
Vinton	Mason & Cook	Cooper Shop.
Waverly Sta't'n	Beck & Shaeffer	Brick Yard & Grist Mill.
Wytheville	S. Walton & Co.	Plaster Works.

Beechwood	Two Coke Ovens.
Benwood	Tube Works.
Blue Stone	Goodwill, Marshall & Co.
	Coal Mining.
Bramwell	Tannery.
Buckhannon	Morrison & Co.
	Stave Mill.
Buckhannon	Hart & Giffen
	Refitted Flour Mill.
Caperton	Sewell Mining Co.
	Two Coke Ovens.
Charleston	Big Sandy Iron & Coal Co.
	Iron and Coal.
Charleston	Cheat Valley Boom & Lum- ber Co.
	Saw Mills, &c.
Charleston	Glenwood Co.
	Mining, &c.
Charleston	Coal River Mining Co., Coal Mfg., &c.
Charleston	Vickers Wagon Works Co.
	Wagon Factory.
Charleston, n.	Kanawha Railway Co.
	Coal Mining.
Clarksburg	J. F. Osborne's Sons.
	Foundry.
Coalbush	S. M. Buck.
	Coke Ovens.
Coal Valley	Carver Coal Co.
	Coal Min., Coke Mfg., &c.
Film Grove	Elm Grove Oil & Gas Co.
	Natural Gas and Oil.
Hampton, near J.	M. Buck.
	Coke Ovens.
Huntington	Hunting. Water Wks. Co.
	Water Works.
Parkersburg	Parksb. Ven. & Panel Co.
	Veneering Works.
Parkersburg	Parkersburg Electric Lt. Co.
	Increase of Capital Stock.
Plymouth	Arkensaw Coal Co.
	Coal Mining.
Powellton	M. Carbon Coal Co.
	Two Coke Ovens.
St. George	Titus & Clowge.
	Saw and Grist Mill.
St. George	Cheat River Boom & Lum- ber Co.
	Lumber Booms, &c.
Sunny Side	Thomas & Lewis
	Two Coke Ovens.
Wheeling	McGraw's Run Oil & Gas Co.
	Oil and Gas.
Wheeling	Wheeling Min. & Mfg. Co.
	Coal Mining, &c.
Wheeling	Fulton Paper Mill Co.
	New Paper Mill.
Wheeling	Wheeling Electrical Co.
	Enlarged Plant.
Wheeling	Elm Grove Oil & Gas Co.
	Oil and Gas.
Wheeling	W. Va. Purv. Agency & J. Mfg. Drug Co.
	Drugs.
Wheeling	Farl E. Page
	Soap Factory.
Wheeling	Wheeling China Co.
	China Ware, &c.
Wheeling	Norway Tack Co.
	
Wheeling	Belmont Iron Co.
	Enlarged Furnace.
Williamsburg	W. H. Wyatt
	Corn Mill.
Winfield	L. J. Ashworth
	Broom Factory.

New Jersey....Southern Cotton Oil Co.... } To build Cotton-seed Oil Mills in the South.

†Companies or firms in existence prior to Jan. 1, 1887, but since that time have either enlarged their works or built new works, or increased capital. In many of these cases given in this list, reference is made to entirely new works built by old firms.

To the already large mass of information regarding the present condition and prospects of "The New South" Mr. M. B. Hillyard has contributed a valuable addition in the shape of a large octavo volume bearing that title and published by the Manufacturers' Record Co., of Baltimore. That periodical is a well-known authority on the subject; and Mr. Hillyard has in this book grouped the distinctive features and characteristics of each Southern State, and presented them for consideration in a succinct, intelligent and altogether admirable manner.—N. Y. Com. Advertiser.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Alexander City.—A. B. Lovejoy will build a \$10,000 hotel.

Andalusia.—The Andalusia & Chaffin Pole Road Co. will shortly be organized.

Anniston.—Pinder & Co. will build works to manufacture steam engines extensively.

Anniston.—C. M. Barnell, of Atlanta, Ga., contemplates erecting a saw mill, with a daily capacity of 40,000 feet, along the Georgia Pacific Railroad, between Anniston and Birmingham.

Anniston.—W. A. Hudson contemplates erecting works at some point in the South to manufacture car couplers, and is now investigating the advantages of Anniston.

Anniston.—The Young Men's Christian Association will erect a building. The cost will not be less than \$10,000.

Ashville.—The Riverside Land & Lumber Co. has been chartered by J. M. Smith, of Talladega, and D. W. McBrier and J. N. Crowder, of Riverside.

Athens.—The Brush Electric Light & Power Co. are negotiating for the erection of the electric light plant previously reported.

Birmingham.—The Caldwell Printing Works, reported last week as putting in stereotyping machinery, will shortly put in an incandescent electric light plant of 75 lights capacity.

Birmingham.—The Birmingham Street Car Factory Co., capital stock \$100,000, has been organized to manufacture street cars. Will soon begin building works.

Birmingham.—It is rumored that new gas works will be built.

Birmingham.—The Rushton Land Co., capital stock \$200,000, has been organized, with W. J. Rushton as president, and E. T. Enslin, treasurer.

Birmingham.—G. Heunck, of Cincinnati, O., will build a theatre.

Birmingham.—Charles Lougue, of New Orleans, La., is in Birmingham with a view to organizing a stock company to manufacture engines.

Birmingham.—James C. Long will receive bids until April 5 for macadamizing about 4 miles of road.

Birmingham.—The Lake Side Land Co., capital stock \$200,000, has been incorporated with F. W. Miller as president and F. B. Clements, secretary.

Birmingham.—The Clifton-Birmingham Brick Co. has been incorporated by M. T. Summer and others. The company will build works to manufacture 100,000 bricks daily.

Birmingham.—Leigh Carroll is putting some new machinery in his brick works.

Birmingham.—P. Schillinger has purchased a 25-ton ice machine for his brewery at a cost of \$13,000.

Brewton.—Smith, Poley & Co. are improving their mill and are adding some new machinery.

Decatur.—Charles F. Barrow and J. D. Jervis, of Ironton, O., will erect a wheelbarrow and wood-working factory.

Florence.—A \$400,000 stock company will be organized to erect a charcoal furnace and chemical plant with W. B. Wood as president; M. A. Spurr, Nashville, Tenn., treasurer, and H. M. Pierce, Nashville, general manager. A site has been secured.

Florence.—Brick works have been started by Leftwich & Sample.

Florence.—The W. B. Wood Furnace Co. has been chartered by W. B. Wood, W. C. Sherrod, W. P. Campbell, J. B. White, W. E. Blair and Jonathan Morris.

Florence.—The Florence Land, Mining & Manufacturing Co. have purchased brick machinery.

Florence.—The Florence Compress, Packet & Ferry Co., capital stock \$50,000 has been organized with W. P. Campbell as president; John H. Young, vice-president, and James B. White, secretary and treasurer. They have contracted with the Curry Compress Co., of Huntsville, for a compress.

Gadsden.—The Gadsden Electric Light Co., previously reported, have organized with A. Herzberg as president; W. B. Myers, secretary, and W. P. Lay, treasurer. The company have purchased machinery.

Huntsville.—Robert E. Coxie has asked for permit to erect an electric light plant.

Huntsville.—The Consolidated Coal & Iron Co., of Chattanooga, Tenn., have made a proposition to build the Cincinnati, Huntsville & Birmingham Railroad from Huntsville to the Tennessee river.

Montgomery.—Davis Brothers have purchased machinery and will erect large brick works.

Oxanna.—C. C. Huckabee, owning a cotton-seed oil mill in Southern Alabama, has formed a \$30,000 stock company to move it to Oxanna and enlarge it.

Roanoke.—John A. A. West, general manager of the Griffin, Lagrange & Western Railroad Co., will receive bids until May 15 for constructing, grading and furnishing cross-ties for 110 miles of railroad. Douglas Green, of New York, has been elected president of the above company and E. H. Searcy, vice-president.

Selma.—The Selma Land Co. will build a large packing-house and refrigerator for Armour & Co., of Chicago, Ill.

Selma.—A \$20,000 stock company has been organized to erect a rolling mill.

Selma.—A company has been organized to manufacture stoves. Its capital stock is \$25,000.

Selma.—A company has been formed to establish chain works. The capital stock of \$25,000 has been subscribed. E. R. Kinsey can give information.

Selma.—It is stated that a Pittsburgh capitalist will build a rolling mill. E. G. Gregory can give information.

Tuscaloosa.—The Friedman Furnace Co., recently reported as incorporated to build a 100-ton furnace, will commence work at once.

Tuscaloosa.—The Tuscaloosa Northern Railway Co., previously reported, has been organized with H. H. Peck as president; W. C. Jemison, vice-president; S. A. Wood, secretary, and George A. Searcy, treasurer.

Wheeling.—The Woodward Iron Co., lately reported as repairing their No. 1 furnace, are opening a new mine, and will build some new coke ovens.

ARKANSAS.

Antimony City.—A smelter is being erected by Philadelphia parties.

Arkansas.—The Memphis, Arkansas & Texas Railroad Co., capital stock \$2,500,000, has been chartered to build a railroad from Memphis, Tenn., to Pine Bluff, via Marianna and Clarendon. The directors are George Arnold, T. F. Duffin, Napoleon Hill and H. S. Brooks, of Memphis, and L. Lesse, J. M. Hewitt and others.

Fort Smith.—The Fort Smith & Van Buren Street Railway Co., capital stock \$50,000, has been chartered to build a street railroad to Van Buren. Thomas Marcum is president; R. E. Doyle, vice-president, and M. S. Blakemore, treasurer.

Fort Smith.—The Fort Smith Belt Railroad Co., capital stock \$100,000, has been incorporated to build a street railroad about 8 miles long. The directors are H. E. Kelly, J. F. Read, William M. Cravins and J. F. Eberle, of Fort Smith, and L. R. Pratt, of Kansas City, Mo.

Fort Smith.—The Fort Smith Canning Co., capital stock \$100,000, has been chartered with R. E. Doyle as president.

Franklin.—J. R. Patterson & Co. will rebuild their distillery lately burned. Their loss was \$3,000.

Golden City.—The Sylph Mining Co., previously reported as incorporated, will commence mining shortly.

Heber.—M. M. Hazle, Cedar Rapids, Nebraska, will develop a coal mine near Heber.

Pine Bluff.—There is talk of an \$80,000 stock company being formed to erect a cotton compress.

Hot Springs.—The Hot Springs Refrigerating Co., capital stock \$60,000, has been incorporated by J. D. Kimball, G. Leisig, Frank E. Rickey, William J. Woolsey and F. F. Kimball.

Hot Springs.—The Crescent Mining & Smelting Co. has been incorporated to do a general mining, smelting and mercantile business, with G. P. Kenna, G. P. Watson, William J. Little, S. P. Collings, W. H. C. Broadus, F. O. Nickerson and A. Shipley. The authorized capital stock is \$5,000,000.

Hot Springs.—S. W. Fowler is purchasing machinery for a saw mill.

Little Rock.—H. A. Bowman is erecting a large saw and planing mill.

Newport.—The Newport Tanning Co. has been chartered by Messrs. Watson, Williams, Wortenson, Bailey, Heard, Davis and Tucker. Will build works shortly.

Newport.—E. L. Watson, B. C. Morrison, G. W. Decker, G. W. Hurley, J. P. Morrison, F. J. Watson and others, have incorporated the Newport, Jonesboro & St. Louis Railway Co., to build a 40-mile railroad to Jonesboro. The capital stock is \$300,000.

Van Buren.—A company has been formed to erect an ice factory, and will purchase machinery at once. The capital stock is \$30,000.

Yellville.—The Stecker City Mining Co. has been organized with Rudolph Stecker as president; Emil Holden, vice-president; N. W. Dorsey, secretary, and F. S. Baker, treasurer.

FLORIDA.

Bartow.—Thompson & Co. have received the contract to erect a school building at \$17,277.

Blackwater.—\$15,000 have been raised for building a glass factory. A site has been secured. Troman Davidson can probably give particulars.

Branford.—New machinery is being added to the works of the Branford Lumber Co. George E. Drew is president.

Brooksville.—R. M. Wallis, of Mill Village, Pa., contemplates erecting a planing mill.

Ellzey.—G. H. Sullivan will at once rebuild his saw mill reported in this issue as burned; loss, \$3,000.

Fernandina.—The city council will advertise for bids for building water works.

Fort Meade.—An effort is being made to organize a company to build a shingle mill and orange box factory.

Norwalk.—Surveys are being made for the proposed St. Johns River, Lake Weir & Gulf Railroad, to run from Norwalk to Anclote, 120 miles.

Pierson.—W. Grayson Mann, M. M. Mann and Nils L. Pierson have formed the Pierson, Kenwood & Palmetto Railroad Co., to build a narrow gauge railroad. Work is progressing.

Palatka.—It is reported that D. F. Larkin, of Watch Hill, R. I., will build a hotel.

GEORGIA.

Athens.—A company has been organized to erect a large sash, door and blind factory and have purchased a site. The paid-in capital stock is \$15,000. Work will soon be commenced.

Athens.—It is reported a hotel will be built to cost about \$100,000.

Atlanta.—It is stated that the Southern Cotton Oil Co., Henry C. Butcher, Philadelphia, president, have decided to locate one of their cotton-seed oil mills.

Augusta.—T. M. Coskery has decided to build his new hotel, previously reported, at once.

Augusta.—Northern and Western parties have purchased a large tract of land near Augusta, and will probably build a hotel and a dummy railroad from the hotel to Augusta. F. T. Lockhart can give information.

Dalton.—It is reported that G. W. Owens is organizing a company to develop a marble quarry.

Dalton.—Colonel Houston is corresponding with Northern parties in regard to the building of a charcoal furnace at his iron mines.

Douglasville.—The name of the company previously reported as organized to erect a canning factory, is the Douglasville Canning & Preserving Co. The capital stock is \$25,000.

Dubois.—The saw mill of Samuel Carnes, reported in this issue as burned, will be rebuilt. The loss is \$8,000.

Forsyth.—Bennett Bros. will erect a planing mill at once.

Graysville.—The Graysville Mining & Manufacturing Co., capital stock \$250,000, have organized with A. Steiner as president, and F. A. Vaughan, of Dadeville, Ala., secretary and treasurer. The company have bought the entire property of the Catoosa Mining & Manufacturing Co., and will, it is said, build new lime kilns and a woolen mill.

Juno.—Charles J. Harben has purchased machinery for a saw mill.

Macon.—Campbell, VanSycle & Co. and others have organized the Macon Agricultural Works. Will build works immediately to manufacture agricultural implements.

Macon.—Will decide by vote April 23 whether or not to build a \$20,000 market house. H. A. Blue will give particulars.

Marietta.—Bids for erecting a bridge 108 feet long will be received until April 23 by H. M. Hammett.

Milledgeville.—The brick works of Foster & McMillan are being enlarged.

Milledgeville.—The Milledgeville Cotton Compress Co., previously reported, want the price of a complete compress with a daily capacity of 500 bales. Address Foster & McMillan.

Montezuma.—A brick yard will probably be started at Montezuma.

Oostanula.—L. D. Armstrong will probably rebuild his ginney, reported last week as burned.

Rockmart.—Ellis Whitehead has enlarged his flour mill.

Rome.—The Forestville & Printup City Street Railroad Co., capital stock \$25,000, has been formed to build a dummy street railroad. J. A. Stansbury is reported to be interested.

Rome.—The Rome Land, Iron & Improvement Co., previously reported, want bids for building a charcoal furnace at once. Correspondence with contractors is desired.

Rome.—The Rome Foundry & Machine Works, previously reported as to build new works, have decided to locate them in West Rome. They will begin work at once.

Rome.—F. Pence proposes to organize a \$5,000 chair factory, \$5,000 trunk factory and \$5,000 broom factory, and, in connection with J. W. Rounsaville, a \$25,000 woodenware factory.

Savannah.—J. H. Estell, chairman county commissioners, invites plans and estimates for a jail to cost \$50,000; also a jail to cost \$100,000. They will be received until July 5.

Thomaston.—McGrady & Matthews, S. G. Smith and others have organized a stock company to build a cotton compress. Will begin work at once.

Thomaston.—Herring, Moyer & Co. have started a coffin and furniture factory.

West Point.—Lanier Bros. contemplate erecting an ice factory of 10 tons capacity.

West Point.—The contract to build the West Point College has been received by Floyd & Stephens, of Opelika, Ala.

West Point.—The cotton mills of the West Point Manufacturing Co., reported in this issue as burned, will be rebuilt at once. The loss is reported to be \$250,000.

KENTUCKY.

Ashland.—P. H. Sudith has received the contract to erect a public building to cost \$8,713.50.

Ashland.—Louis E. Granger, Henry Kelden and Henry McTighe have incorporated the Great Western Marble Co., to quarry and manufacture marble and granite in Utah. The same parties have incorporated the Rising Star Marble Co., to quarry and manufacture marble in Colorado. The authorized capital stock of each company is \$1,000,000.

Frankfort.—The Mason, Gooch & Hoge Co. has been chartered to build railroads, bridges, turnpikes, water works, &c. Their capital stock is \$500,000.

Frankfort.—The St. Helen's Land, Coal & Iron Co., capital stock \$1,000,000, has been incorporated to develop 12,000 acres of coal and timber lands in Lee county.

Louisville.—Robinson Bros. & Co. have commenced work on a large building to cost about \$45,000.

Louisville.—George Stoops will erect a five-story brick building, 50x110 feet.

Louisville.—The Louisville-Kentucky Woolen Mills Co. will build a brick factory, two stories, 65x75 feet. It will cost \$7,500.

Louisville.—The Church of the Advent will erect a new edifice to cost about \$20,000. It will be of brick, 60x104 feet. Plans have been prepared by Frederick C. Withers.

Louisville.—C. S. Murgell has prepared plans for a \$12,000 building to be built on Highland avenue by the Highland Presbyterian Church.

Louisville.—Dennis Long will erect a large building to cost \$100,000. He has purchased a site 56x105 feet.

Louisville.—It is reported that the Queen's Life Insurance Co. will erect a \$250,000 building.

Maysville.—A canning factory is projected by Mr. Wesley, of Lexington, and others.

Nicholasville.—A company is being organized to build a hotel. J. S. Bronaugh is interested.

Portland.—Mr. Cook has purchased 13 acres of land and will start large brick works.

Somerset.—A. Potts, of Danville, is organizing a stock company to build a roller flour mill.

LOUISIANA.

Bayou Sara.—J. Freyhan & Co. can give information in regard to the company reported last week as being organized to erect a cotton compress.

Cypremort.—M. P. Scully will build a five-roller sugar mill. The Whitney Iron Works Co., New Orleans, have received the contract for the machinery.

Jeanerette.—The name of the company previously reported as being organized to build a railroad to Abbeville, about 30 miles, is the Jeanerette, Abbeville & Western Railroad Co. F. M. Welch has been elected president; N. M. Cade, vice-president; G. Sitges, secretary, and S. R. Gray, treasurer. The road is to be built soon.

Mansfield.—A company has been organized to build a cotton-seed oil mill and ice factory. Reported that machinery will be purchased immediately. W. T. Pegues is interested.

New Orleans.—The Gerards' Rectilinear Propellor & Rotary Engine Co. has been incorporated to manufacture engines, &c., with Charles E. Black, Edward W. Huntington, Augustus Reichard, Albion K. Miller, Jules C. Denis and others as directors. The capital stock authorized is \$1,000,000.

Shreveport.—A meeting has lately been held for the purpose of organizing a stock company to build a cotton factory to cost from \$300,000 to \$400,000. Henry Florsheimer is interested.

Tallulah.—The contract to build the jail, previously reported, has been let to Hannon & Voss, at \$20,955.

MARYLAND.

Adamstown.—A creamery is being erected by Henry E. Smith, John O. Padgett and Thomas Hayden.

Baltimore.—The Maryland Construction & Land Improvement Co., capital stock \$100,000, has been incorporated by John King, Carson Schumacher, Christopher Shaw, Charles N. Magne, W. C. Boswell and George B. Morton.

Baltimore.—A four-story building will be erected at the corner of Front and Baltimore streets by William Sues.

Baltimore.—The Standard Mutual Land & Mining Co. has been incorporated by John M. Jones, William S. Morrow, John Goodwin, William H. Wilson and James P. Shannon. The authorized capital stock is \$10,000,000.

Baltimore.—The report of large steel works being built near the city is confirmed. J. Wesley Guest, of Baltimore, and others have purchased 1,200 acres of land, and will erect works to make steel rails, build steel ships, etc. Several million dollars will be invested.

Baltimore.—Estate of W. E. Hooper will erect a 225 horse-power boiler and engine on Wolf street; G. H. Hutton & Co., Harford avenue and Point lane, a 12 horse-power boiler and engine, and O. Hammond, Jr., 122 N. Paca street, two 80 horse-power boilers.

Castleton.—A canning factory is being erected by James T. Knight.

Chesapeake City.—It is stated that a canning factory is to be built.

Feagaville.—S. F. Hargett, D. M. Culler C. E. Feaga and H. J. Beard have formed the Red Spring Creamery Co. and are now

building their creamery. Its capacity will be 12,000 pounds of milk daily.

Frederick.—A \$5,000 stock company has been organized to manufacture stockings by David Lowenstein, George H. Zimmerman, Thomas H. Haller, M. E. Getzendanner and John Baumgardner. Mr. Lowenstein is president.

Hagerstown.—The Danzer Lumber Co. has been organized to manufacture building materials, office furniture, &c., with G. L. Brewer as president; George D. Keller, treasurer, and William C. Danzer, manager. The company will enlarge and occupy the Danzer factory on Baltimore street.

Gamber.—Lewis Shipley will enlarge his canning factory and add new machinery.

Georgetown, D. C.—The Mount Vernon Bridge Co., of Mount Vernon, O., have received the contract to build the aqueduct bridge across the Potomac river, previously reported. It will cost \$80,905, and is to be completed within 7 months. The length will be 1,313 feet.

Washington, D. C.—The contract to erect a school building has been awarded to Holliday & Wilson, at \$22,176.

MISSISSIPPI.

Columbus.—S. Rosenbaum & Co. and others will build a furniture factory.

Corinth.—B. F. Avery, of Meridian, has purchased the cotton factory building and will, it is said, put in machinery for manufacturing furniture.

Corinth.—J. D. Draughan and others are working up a stock company to build a cotton compress.

Jackson.—The Jackson Land & Improvement Co., capital stock \$35,000, has been incorporated by J. B. Harris, W. W. Stone, William Short and others. They will probably build a street railroad or secure the building of one.

Natchez.—The name of the company reported last week as being formed to build a hotel to cost about \$75,000, is the Natchez Hotel Co.

Natchez.—The contract to build the water works, previously reported, has been let to S. R. Bullock & Co., of New York. Work will be commenced shortly.

Slate Springs.—There is talk of a cotton factory being erected.

Vicksburg.—Eugene Martin, Thomas M. Smedes, Alfred B. Pittman and others have incorporated the Warren County Manufacturing Co., capital stock \$100,000, to manufacture all kinds of goods from cotton, and oil from cotton seed.

NORTH CAROLINA.

Asheville.—C. G. West & Co. have made arrangements to start a wood-working factory.

Forest City.—A plumbago mine, 4 miles from Forest City, is being developed by D. E. Stearns.

Goldsboro.—A stock company has been formed to start a furniture factory.

Greensboro.—Greensboro has decided by a popular vote to issue \$100,000 of bonds for public improvements.

Mooreville.—Efforts are being made to organize a company to build a large cotton factory.

Raleigh.—The Commissioner of Immigration writes us that W. G. Slate, of Slate, Pa., will start a fruit canning factory in North Carolina.

Raleigh.—It is reported that an earthenware factory will be started at or near Raleigh by W. Hughes and H. Stimetz.

Raleigh.—Arrangements are being made for the erection of a canning factory.

Salisbury.—Robertson & Miller will rebuild their tobacco factory reported in this issue as burned; loss \$17,000.

Swift Island.—Elias Hurley has established a shuttle-block factory.

Troutmans.—Shiplett & Kiser will remove their barrel and stave factory from Thomasville to Troutmans.

Wadesboro.—It is rumored that a silk factory will be built. J. T. Patrick, Raleigh, may give information.

Wadeville.—A shuttle-block factory has been established by Thomas Wade.

Wake Forest.—The contract to build the laboratory for Wake Forest College, previously reported, has been let to Ellington, Royster & Co., of Raleigh. It will cost \$13,000.

Winston.—A company will, it is stated, be organized soon to erect the electric light plant previously reported.

Winston.—Arrangements are being made for establishing a fruit canning factory.

SOUTH CAROLINA.

Aiken.—A. J. Twiggs, of Augusta, Ga., has leased land and water power and will build a wood pulp mill.

Charleston.—The Charleston & Savannah Railroad Co. (office, Charleston) are building a branch railroad from Ravenel Station to Young's Island, 5½ miles.

Charleston.—A. S. Emerson is erecting a corrugated iron building for his steam laundry.

Greenville.—The Huguenot Mills will build an addition to their cotton mill, 40x40 feet, and put in 64 looms instead of 10 as reported last week. They will also put in sprinkling machinery.

Pacolet.—The Pacolet Manufacturing Co. have commenced work on a large addition to their cotton mill.

Pickens.—Boggs & Phillips have overhauled and improved their saw mill.

Walhall.—The Columbia & Greenville Railroad Co. (office, Columbia, S. C.) will at once extend the Blue Ridge Railroad to Walhalla.

TENNESSEE.

Benton.—A company has been formed to build a hotel, 50x100 feet.

Chattanooga.—It is rumored that the La Crosse Cracker Co., La Crosse, Wis., will probably build a factory.

Chattanooga.—W. M. Nixon and others have leased and will develop the Half-Moon Island ore mines near Chattanooga.

Chattanooga.—John A. Hart, W. G. McAdoo, M. L. Chapman and others will organize a company with a capital stock of \$250,000, to secure manufactories for Chattanooga and aid in their establishment.

Chattanooga.—The East Mission Ridge Railroad Co. has been chartered.

Chattanooga.—The Chattanooga Land, Coal, Iron & Railway Co., capital stock \$12,000,000, has been organized with J. W. Adams as president, T. G. Montague, vice-president, and H. Clay Evans, secretary and treasurer. The company owns over 21,500 acres of land, which they will develop. They contemplate building two blast furnaces 2½ miles from Chattanooga and 500 coke ovens on Walden's Ridge, two or more bridges across the Tennessee river, a belt railroad, a railroad to Signal Point, gas and water works, &c. The company will extend aid to manufactories, &c.

Chattanooga.—M. B. Parkham has put steam power in his mattress factory.

Chattanooga.—It is rumored that George M. Thompson, of Ripley, Ohio, will probably build a saw mill.

Chattanooga.—The Standard Gas Machine Co., capital stock \$100,000, has been organized with John C. Anderson as president; F. S. Hyde, vice-president; Frank Hoyt, secretary, and P. A. Bacon, treasurer.

Chattanooga.—The Soddy Coal Co. have sold out their property to E. Zimmerman, Henry Stix, M. Krohn, A. & L. Seasongood and others of Cincinnati, O., who will organize a new company, with a capital stock of \$600,000, to develop the property. The new company will build additional coke ovens.

Columbia.—Craig & Williams have built an addition to their machine shops, 30x60 feet.

Covington.—Randall Bros., of Benton Harbor, Mich., have lately built a lumber mill and box factory, and now have them in operation.

Dayton.—R. C. Barbero, of Vincennes, Ind., will erect a planing mill and sash factory at Dayton and a planing mill near Dayton.

Dayton.—Gilbreath & Burchard are building an addition to their broom factory.

Dayton.—The Dayton Oil & Gas Co., capital stock \$100,000, has been organized with J. H. Ferguson as president; M. A. Farrell, vice-president; T. T. McWhirter, secretary and treasurer, and S. A. Gettys, superintendent. The company are leasing lands and will shortly begin developing them.

Franklin.—Greene Williams has the contract to build a \$10,000 church.

Jellico.—The Proctor Coal Co., of Louisville, Ky., will build a railroad $3\frac{1}{2}$ miles long.

Knoxville.—James H. Bean, of Knoxville, and others, lately reported as purchasing 2,067 acres of land 12 miles from Athens, have formed a \$100,000 company to start a new town, develop marble quarries, establish manufactories, &c. A railroad will be built to the quarries.

Knoxville.—The Elmwood Street Railroad Co. has been incorporated.

Knoxville.—E. J. Hoyle, Frita Staub and others contemplate organizing a company to build a hotel to cost from \$250,000 to \$400,000.

Knoxville.—George R. Scates will form a company to develop gold and silver mines in Blount county.

Knoxville.—A company has been organized to start a steam cracker factory, with C. Cone as president; M. L. Ross, vice-president, and J. M. Gaut, secretary and treasurer. The capital stock will be about \$20,000.

Linden.—Robert Houssels has sold mineral lands to Memphis parties, who will develop them and build a furnace on the Tennessee river.

Memphis.—The Memphis Cotton Mills will increase their capital stock.

Morristown.—There are prospects of a large hotel being erected.

Morristown.—It is stated a company is being formed to start a furniture factory.

Morristown.—A company is being organized to build a sash, blind and door factory.

Morristown.—The name of the company reported last week as organized to start a stove foundry is the Morrison Stove Works. R. L. Gant is president; W. T. Rippetoe, vice-president; George S. Crouch, treasurer, and C. R. Johnson, Girard, O., secretary and general manager. The capital stock is \$20,000.

Newmarket.—J. W. Gardner is erecting a flour mill at Friend's Station (P. O. at Newmarket).

Nashville.—The Chattanooga, Cleveland & Ducktown Railroad Co. has been incorporated by J. T. Wilder, of Roan Mountain; John W. Stone, D. A. Nunn, B. W. Padgett and G. Cate.

Nashville.—It is stated that Mr. Ferriss is organizing a company to start a soap factory.

Nashville.—The Mansfield & University Street Railroad Co. has been incorporated by Hugh McCrae, B. Lanier, J. C. McCrory, J. A. Pique and F. C. Murry.

Nashville.—The American Wire Hoop Co., of Jackson, has been reorganized, and the capital stock has been increased to \$600,000. The company will build their works at West Nashville.

Nashville.—J. W. Thomas, J. W. Sperry, H. Sperry, D. F. Wilkin, Horace Scott and T. O. Morris have incorporated the Scott Street Railroad Co.

Nashville.—The Automatic Water Gas Co., capital stock \$100,000, has been organized by Messrs. Price, McComb, Wheelless and others.

Oaltewah.—A Northern company have commenced boring for oil.

Obron.—L. V. Boyle & Co. will rebuild their planing mill reported in this issue as burned; loss, \$40,000.

Riceville.—Bishop & Son contemplate erecting a new wagon and carriage factory, two stories, 35x75 feet, with a blacksmith shop, 30x50 feet.

Riceville.—Bishop & Son want prices of a complete outfit of machinery for a 50-barrel roller flour mill.

Rockford.—The Rockford Cotton Mills, lately reported to put in new machinery, are adding 1,600 spindles, together with speeders, twisting machinery, &c. The cost will be about \$11,000.

Sadlersville.—T. J. Mitchell has purchased the Sadler mill, and will put in machinery for a woolen mill.

South Pittsburg.—D. J. Chandler has contracted to erect a bank building to cost not less than \$10,000.

Union county.—The Tellico iron property has been purchased by Mr. De Camp and William Means, of Cincinnati, O.; O. Fletcher, Nashville; R. L. Bright, Chattanooga, and several others. They will build a railroad from Sweetwater to the property, and will, we are informed, build slate works.

West Point.—A company will shortly be organized to erect the charcoal furnace and chemical plant previously reported. Its capital stock will be \$400,000. E. W. Cole, of Nashville, will be president. A site has been selected.

White Pine.—E. P. Moulton has sold lead mines to a company who will develop them at once.

TEXAS.

Benjamin.—Knox county will build a \$10,000 jail.

Boerne.—Richard Crosker will start an ice factory.

Corsicana.—The Corsicana Lumber & Manufacturing Co. has been chartered by P. C. Beale, F. W. Caruthers, C. W. Jester, H. G. Damon and S. C. Olive. Its capital stock is \$50,000.

Cuero.—A \$250,000 company has been chartered to build a canal to bring the waters of the Guadalupe river to Cuero.

Dallas.—Hughes Bros. & Co. will shortly begin work on their new factory previously reported. They will manufacture grocers' sundries.

El Paso.—Mr. Ennis and others have formed a company to build a canal for irrigating purposes.

El Paso.—The Wilmore Town Co. has been organized to build a new town in the Rio Grande Valley.

Greenville.—A company has been formed to build a street railroad.

Greenville.—A large roller flour mill is to be erected.

Hillsboro.—J. D. Warren, A. H. Files, C. M. Dunham and others have organized a national bank and will erect a bank building.

Mount Pleasant.—A brick-yard has been started lately.

Paris.—It is reported that plans are being prepared for the erection of a large ice factory and refrigerating and bottling works.

Paris.—The Methodists will build a brick church, 60x85 feet, to cost about \$20,000.

San Antonio.—Louis S. Berg and others are organizing a company to erect an electric light plant. They will adopt the Thompson-Houston system.

Santa Anna.—A 200-barrel flour mill will, it is said, soon be built.

Waco.—It is stated that Messrs. Dennis, Seoville and King, previously reported as

leasing the Waco Cotton Mills and putting them in operation, will enlarge the mills.

Waldo.—The Leakey Kaolin Co. are preparing to develop kaolin mines.

VIRGINIA.

Bland county.—The Round Mountain mineral property, reported last week as being purchased by C. G. Holland, of Danville, A. S. Buford, Richmond, and others, will be developed as soon as a railroad is built to the property.

Blue Ridge Springs.—A canning factory will be started by T. F. Weeks & Son.

Buchanan.—Mineral lands near Buchanan have been leased and will be developed by Mr. Cook.

Covington.—The Alleghany Iron Mountain & Mining Co. have leased their mines to Frank Lyman, of New York.

Danville.—A bill will be introduced in the legislature to allow Danville to appropriate \$100,000 of a certain fund for the new gas works previously reported, and for improving the streets, etc.

Fincastle.—An iron foundry will be started by Oscar Bowyer.

Greenville.—Vines & Steele will enlarge operations at their manganese mines.

Lynchburg.—A large 3-story building will be erected by George Murrell.

Lynchburg.—It is rumored that the Lynchburg Iron Co., contemplate erecting a steel plant.

Newport News.—The Newport News & Mississippi Valley Railroad Co., (office, Richmond,) contemplate building a coal pier 275 feet long.

Petersburg.—It is reported that Northern parties have purchased the Upper Appomattox Canal and will spend several hundred thousand dollars in building mills, &c.

Richmond.—The Carbon Hill coal mine, near Richmond, has been purchased by the Richmond Coal Mining & Manufacturing Co.; Ware B. Gay, 30 Kilby street, Boston, Mass., president. Mining will be resumed as soon as the Tuckahoe & James River Railroad can be constructed and shafts sunk. The capital stock of the company is \$300,000. The contract to build the railroad and sink the shafts has been let to Whidden, Hill & Co., 101 Milk street, Boston.

Salem.—Preston, Evans & Co., lately reported as starting a canning factory, will, after this season, manufacture their own cans and boxes. They will probably start a broom and bucket factory to employ their hands all the year.

Salem.—Mr. Tower, of New York, has purchased and will develop the Botts iron mines near Salem. M. M. Rogers, Salem, can probably give particulars.

Virginia.—A Philadelphia company, (represented by Evans R. Dick, 147 Fourth street,) owning 6,000 acres of iron lands in the Cripple Creek region, and 40,000 acres of coal lands, contemplate mining coal and manufacturing iron and coke on a large scale, but as yet have formed no plans which they care to make public.

Virginia.—Bills have been introduced in the legislature to incorporate the Murfreesboro Railroad & Telegraph Co.; the Roanoke Rolling Mill Co.; the Clinch River Construction Co.; the Pulaski Water Supply Co.; the Balcony Falls Co.; the Norfolk Dock Improvement Co., to build, repair and manufacture steamships, and construct a warehouse and compress at Norfolk, with William Lamb, Walter H. Taylor and others as incorporators; the Spottsylvania Railroad Co.; the Virginia Immigration, Land & Improvement Co.; the Orange Telephone Co.; the Portsmouth Street Railway Co., with W. H. Steward and others as incorporators; the Chowan & Southern Railroad Co., with Joseph T. Tunis, C. M. Serpell, W. W. Tunis, S. Eccles, Jr., and Theopholis Tunis as incorporators, the Farmville Water Co.; the Salisbury Coal Mining & Manufacturing

Co.; the Northern Neck Telegraph & Telephone Co.; the Dimviddie & Brunswick Lumber & Wood Transportation Co.; the Bermuda Hundreds Construction Co., to build railroads, piers, docks, tunnels, bridges, elevators, &c., with James H. Young, Mason Young, Franklin Stearns, Richard Irwin, Jr., James R. Worth, R. A. Dunlop and William H. Young as incorporators, and the Bristol-Goodson Water Co.

Wytheville.—A wagon and carriage factory will be built by W. H. Sult.

WEST VIRGINIA.

Austen.—The Austen Coke Works, C. Jessop, agent, will build 12 more ovens at once. They contemplate building 23 more. They are testing their clay deposits, and expect to build brick works if the results are satisfactory.

Charlestown.—William Phillips & Sons will at once erect a large sash factory.

Fairmount.—J. E. Watson & Co. will build some new coke ovens near Fairmount.

Huntington.—The Newport News & Mississippi Valley Railroad Co., (office, Richmond, Va.,) will enlarge their machine shop and build a new paint shop.

Mason City.—The Hope Manufacturing Co. will at once rebuild their large salt works reported in this issue as burned; loss \$50,000.

Moundsville.—J. W. Craig and Frank Lowry have asked permit to lay pipes to furnish natural gas.

Wheeling.—The Southern Natural Gas & Oil Co. have issued \$5,000,000 of bonds for the purpose of developing their mineral, oil and gas lands, embracing nearly 200,000 acres.

BURNED.

Aubrey, Texas.—The gin of C. G. Caddell & Francis.

Bath, S. C.—The saw mill of W. H. Dowdy.

Claiborne county, Miss.—The grist mill and gin of Ann B. Archer.

DeSoto parish, La.—The saw mill and gin of R. B. Hollingsworth; loss \$3,500.

Dodge county, Ga.—The shingle mill of Peyton S. Ethridge.

Dover, Ky.—The saw and grist mill of S. J. Bumpus, near Dover.

Dubois, Ga.—The saw mill of Samuel Carnes; loss \$8,000. Will be rebuilt.

Dudley, S. C.—The gin of Funderburk & Massey.

Ellzey, Fla.—G. H. Sullivan's steam saw mill; loss \$3,000. Will rebuild at once.

Frankfort, Ky.—The saw mill of Wakefield & West damaged by a boiler explosion.

Gordon county, Ga.—The gin of L. D. Armstrong.

Hardwickville, Va.—The bark mills of A. N. White & Co.

Henry county, Ga.—The mill of A. C. Sloan.

Liberty, Va.—The tobacco factory of Bolling, Wright & Co.; loss \$25,000.

Marion Station, Md.—The steam saw mill of Calloway, Swain & Hastings; loss \$1,200.

Mason City, W. Va.—The large salt works of the Hope Manufacturing Co.; loss \$50,000. Will be rebuilt at once.

New Orleans, La.—The turpentine distillery of E. Koch, Schmitt & Son; loss \$10,000.

Obion, Tenn.—The large planing mill of L. V. Boyle & Co.; loss \$60,000. Will be rebuilt.

Pike county, Ala.—The saw mill of Knox & Spencer.

Raleigh, N. C.—The mill and works of the Raleigh Oil Mill & Fertilizer Co.; loss \$50,000. Will probably be rebuilt.

Richmond, Va.—The brick works of A. Maynard & Co.; loss about \$5,000.

Rusk, Texas.—The saw mill of Robert Pryor, 4 miles from Rusk.

Salisbury, N. C.—The tobacco factory of Robertson & Miller; loss \$17,000. Will be rebuilt.

Sharpe, Ky.—The grist mill of Henry Phelps wrecked by a boiler explosion.

Warrenton, Va.—The whiskey distillery of Mr. Bailey.

West Point, Ga.—The cotton mills of the West Point Manufacturing Co.; loss \$250,000. Will be rebuilt at once.

Wilkinson county, Miss.—The gin of D. Babers.

Flour Mill Machinery Wanted

RICEVILLE TENN., March 26, 1887.

Editor Manufacturers' Record:

We contemplate erecting a new wagon and carriage shop during the year. Our building will be 35x75 feet, 2 stories high. Will also build apart from the main building a blacksmith shop, 30x50 feet, 1 story high.

A new roller process flouring mill will probably be built here this season. Want prices on a complete outfit of machinery for such a mill, with a capacity of 50 barrels per day; none but reliable manufacturers or contractors need apply. Capitalists seeking investments would do well to investigate the mineral lands in this section. In two miles of this place large quantities of red hematite can be found which assays 65 per cent. A number of small industries could find it profitable to locate here. I will cheerfully answer all inquiries in regard to this place or country.

J. B. BISHOP.

LITTLE ROCK, ARK., March 25, 1887.

Editor Manufacturers' Record:

The Little Rock Timber Co. was organized here for the purpose of buying and selling lands, buying, manufacturing and selling shingles, with T. J. Darragh, president, and as secretary and treasurer we have J. Niemeyer.

J. NIEMEYER.

PIERSON, FLA., March 25, 1887.

Editor Manufacturers' Record:

Myself and others have formed a company, and are now building a narrow gauge railroad. We will have it ready next week. It is 3 miles long at present, but will be extended.

N. L. PIERSON.

Contracted for Water Works.

PINE BLUFF, ARK., March 24, 1887.

Editor Manufacturers' Record:

The contract for the construction of water works at this place was let on the 9th of this month to the Water, Light & Power Co., of St. Louis, Mo.

H. KING WHITE.

A Land & Lumber Company.

ASHVILLE, ST. CLAIR CO., ALA., Mar. 25, 1887.

Editor Manufacturers' Record:

Declaration of incorporation of The River Side Land & Lumber Co. was filed in the probate court here to day by J. M. Smith, of Talladega, and D. W. McBrier and J. Crowder, of River Side, Ala. The place of business is Ashville, Ala.

GEORGE R. CATHER.

Adding a Lath Mill.

SEDDON, ALA., March 25, 1887.

Editor Manufacturers' Record:

We are adding a gang lath mill 5 M feet capacity per day.

JENKINS & LESLIE.

FEAGAVILLE, MD., March 28, 1887.

Editor Manufacturers' Record:

We are now building a creamery, and expect be in operation by the first of May. Our capacity will be ten to twelve thousand pounds of milk per day. Will be known as the Red Spring Creamery Co., composed of S. F. Hargett, C. E. Feaga, D. M. Culler and H. J. Beard.

HARGETT, CULLER & CO.

Selma's New Enterprises.

SELMA, ALA., March 24, 1887.

Editor Manufacturers' Record:

Messrs. Wells, Hicirda & Stuck are erecting new bottling works in this city, and expect to begin operations by the 10th of April. Messrs. Golding & Inersen are also erecting a large ice factory, and will begin freezing water by the 1st of May. The Selma Land Co. will begin immediately the erection of a large packing-house and refrigerator for Phil. Armour, who will make Selma his Southern distributing point. A company has just been organized with a capital stock of \$20,000 to build and operate rolling mills in this city. A company has also been organized with a capital stock of \$25,000 for the manufacture of stoves in Selma. Another important enterprise is the chain works to be operated in this city, with a capital stock of \$25,000, all subscribed.

E. R. KINCEY, Editor Selma Times.

Enlarging Tannery.

GREENVILLE, S. C., March 26, 1887.

Editor Manufacturers' Record:

We have put in a fifteen H. P. engine; new bark mill; new heat leaches, with steam; a new scouring machine. A short time ago we put in 10 vats, of which no notice was made; now we are putting in 12 more. Mr. Goodlett is a practical tanner of 12 years' experience. We also have two cotton gins, one 40-saw and one 60-saw, with feeders and condensers and press, which we propose to put up and run this fall. We are now fixed for business.

GOWER CO. & GOODLETT.

LURAY, VA., March 24, 1887.

Editor Manufacturers' Record:

I am testing a limestone which indicates a good quality. If so, will burn lime on an extensive scale.

J. V. JAMISON.

Erected Large Saw Mill.

PLANK, TEXAS, March 24, 1887.

Editors Manufacturers' Record:

We have about completed and will soon have in operation a first-class saw mill in every respect. Capacity 45 M feet per day.

MIDDLEBROOK & BRO.

Panel and Veneer Works.

PARKERSBURG, W. VA., March 26, 1887.

Editor Manufacturers' Record:

We have organized a panel and veneer works here, to be known as the Parkersburg Veneer & Panel Co., and expect to be running by April 5, 1887.

PARKERSBURG VENEER & PANEL CO.,

J. M. SEUSEMAN, Sec. and Treas.

LOUISVILLE, KY., March 26, 1887.

Editor Manufacturers' Record:

We are now erecting a new building on the site of our former one, which, when all the improvements are finished, will cost \$45,000.

ROBINSON BROS. & CO.

Received Contract to Build Bridge.

MT. VERNON, O., March 26, 1887.

Editor Manufacturers' Record:

We have the award of Georgetown and Washington, D. C., aqueduct bridge, consisting of 9 deck spans, of 114 feet each; 1 viaduct span over canal, 127 feet, and 1 through double intersection truss, 160 feet. To be completed in 7 months.

MT. VERNON BRIDGE CO.

Will Rebuild Saw Mill.

DUBOIS, GA., March 26, 1887.

My saw mill was burned on the 14th inst. Fire started in boiler house. Nothing saved in mill. Total amount lost about \$8,000 or \$9,000. Insured for only \$2,500. Will rebuild as soon as possible.

SAM'L CARNES.

To Develop Coal Mines.

BOSTON, MASS., March 26, 1887.

Editor Manufacturers' Record:

The coal property near Richmond, Va., has been transferred to and is now owned by the Richmond Coal Mining & Manufacturing Co., organized under special charter of the legislature of Virginia. Capital is \$350,000, fully paid. Ware B. Gay, of Boston, is president; John T. Jones, Carbon Hill, Va., mining engineer and superintendent; W. T. Wilcox, Carbon Hill, Va., secretary; H. C. Skinner, New York City, treasurer. Principal office 12 Broadway, New York, and at mines, Carbon Hill, Va. Mining will be commenced as soon as the Tuckahoe & James River Railroad (which is included in the purchase recently made) can be reconstructed and the shafts sunk, all of which will require some months yet. The contract for rebuilding the Tuckahoe & James River R. R., sinking shafts, etc., has been closed with Messrs. Whidden, Hill & Co., 101 Milk street, Boston, Mass., who will at once commence work.

WARE B. GAY.

WEST POINT, GA., March 25, 1887.

Editor Manufacturers' Record:

We have already erected bottling works with a capacity of 5,000 bottles per day, and are contemplating putting up an ice machine of ten ton capacity. The bottling works are already in successful operation.

LANIER BROS.

Building Street Railroad.

BRUNSWICK, GA., March 25, 1887.

Editor Manufacturers' Record:

Work has already begun on the Brunswick Street Railroad. Rails on hand; cars here. Length of road, 4½ miles. Rails steel, 38 pounds to yard, of most improved patterns. Everything will be first-class. Road to be extended as fast as required. To be completed July 1, 1887.

I. R. MUNSHEN.

Erecting Bottling Works.

SELMA, ALA., March 26, 1887.

Editor Manufacturers' Record:

We are erecting a bottling works in this city. The name of the firm is J. W. Wills & Co.

J. W. WILLS.

WILLIAMS STATION, ALA., Mar. 25, 1887.

Editor Manufacturers' Record:

I am putting up or adding a dry kiln and planer to my lumber mill at this place.

W. M. CARNEY.

Additional Machinery.

ROCKFORD, TENN., March 28, 1887.

Editor Manufacturers' Record:

We are adding to our mill 1,600 spindles, which have already arrived, together with speeders, twistors, &c., which will amount to about \$11,000 in the way of improvements. This does not require any new or additional buildings.

ROCKFORD COTTON MILLS,

F. P. TOOF & CO.

Enlarging Foundry.

ANNISTON, ALA., March 26, 1887.

Editor Manufacturers' Record:

We are enlarging our foundry, having extended our buildings one-third and putting in a new and much larger blower, thereby increasing our capacity to 15 tons per day. Have local orders alone to the extent of 7 months ahead now, and outside orders for upwards of 500 tons, with every prospect of so continuing for an unlimited time.

MURRAY & STEVENSON.

Bids for a Charcoal Furnace Wanted.

ROME, GA., March 28, 1887.

Editor Manufacturers' Record:

The Rome Land, Iron & Improvement Co. want bids on a charcoal furnace, to be built at once. Correspondence with builders is desired.

W. P. SIMPSON, President.

Compress Machinery Wanted.

MILLEDGEVILLE, GA., March 25, 1887.

Editor Manufacturers' Record:

We are enlarging our brick yard. We have just put in a Pott's disintegrator and elevator, and we are putting up 3 of Morrison's patent kilns. We are also building a track from our clay beds to the machine, and when everything is completed we will have a first-class plant. We have inquiries out now in regard to a 25-horse-power engine and 30-horse-power boiler. The writer is on a committee to learn the cost of a cotton compress; one with a capacity of 500 bales a day would suit. We want price of compress already to turn on steam. We have lately commenced working our machine shop, and are crowded with work. There is a fine opportunity for some capitalists to add to his pile if he would come down and build a canal so as to utilize the water-power of the Oconee river at this place. 2,500 horse-power can be had at a small cost.

FOSTER & McMILLAN.

New Coke Ovens.

AUSTEN, W. VA., March 26, 1887.

Editor Manufacturers' Record:

We have 65 coke ovens now in operation, and are about to build 12 more, expecting to increase to 100 ovens as rapidly as possible. We use the Bee-hive oven, and are now running 100 tons of coke daily, for which we find ready market, as our coke ranks high, competing easily with Connellsville coke. We are also developing our fire-clay, and expect to put in brick works if the clay meets our expectations.

AUSTEN COKE WORKS.

C. JESSOP, Agent.

ANNISTON, ALA., March 23, 1887.

Editor Manufacturers' Record:

Our city will build a new city hall, with guard-house and fire engine rooms in the same building. The building will be of brick, and will probably cost \$7,500.

R. P. HUGER.

BIRMINGHAM, ALA., March 25, 1887.

Editor Manufacturers' Record:

Mr. Berney, president of the Berney National Bank, of this city, has contracted to erect a \$25,000 hotel at Bessemer, Ala., and work to be commenced in 30 days.

H. F. DE BARDELEBEN.

BARTOW, FLA., March 21, 1887.

Editor Manufacturers' Record:

We have received the contract to build the Summerlin school building at a cost of \$17,227. It is to be of brick, with galvanized iron cornice.

THOMPSON & CO.

To Build Street Railroad.

ROANOKE, VA., March 26, 1887.

Editor Manufacturers' Record:

Our company has been organized, and will get to work as soon as practicable.

THOMAS LEWIS.

President Roanoke Street Railroad.

Brick Works.

MONTICELLO, GA., March 22, 1887.

Editor Manufacturers' Record:

We intend to run a brick-yard on a small scale. Will begin on the 25th or 30th of this month, and make from 7,000 to 10,000 by hand per day. We will put up machinery soon.

CONNER & BRODDUS.

ROGERSVILLE, TENN., March 22, 1887.

Editor Manufacturers' Record:

I have started two portable saw mills on the Holston river, with a capacity of 40,000 feet per day, and will cut exclusively poplar and ash. The cost of the machinery, &c., is \$8,000.

JOHN J. WOLFE.

Ice Factory to be Built.

CLEBURNE, TEXAS, March 22, 1887.
Editor Manufacturers' Record:

I am informed by one of our city councilmen that a Mr. J. W. Day will erect an ice factory here, provided the city council will furnish an unlimited amount of water. The council will do this as soon as it gets the large new pump, ordered some time ago, properly placed in our artesian well, which affords an abundance of water.

S. N. CLARK.

MACON, GA., March 15, 1887.

Editor Manufacturers' Record:

Our new depot is nearly finished, and can say that it is the handsomest building of its kind in the South. Our new freight depot is under contract and will be commenced in a few days by the Fallon Bros., of Savannah. It is to be 100 feet wide by 400 feet long, brick and stone.

E. T., VA. & GA. R. R. Co.

To Develop Mineral Lands.

LINDEN, TENN., March 19, 1887.

Editor Manufacturers' Record:

The mineral land I sold to Memphis parties will be developed in the near future. They have capitalized it, and as soon as they are properly organized will put up furnaces on Tennessee river. ROBT. HOUSSELS.

Marble Quarries to be Developed.

KNOXVILLE, TENN., March 17, 1887.

Editor Manufacturers' Record:

A company of gentlemen have bought 2,067 acres of land on the E. T., Va. & Ga. R. R., 46 miles south of Knoxville, known as the General Reagan farm. The company is stocked at \$100,000. A new town will be built on the East Tennessee road. Extensive marble quarries are near Reagan's, and railroad will be run from the new town to the quarries. Marble mills, wood-working and other factories will be established at the new town at once. It is a beautiful location for a town, good country, and the gentlemen interested mean business. J. H. BEAN.

Iron Bridge to be Built.

PLANO, TEXAS, March 23, 1887.

Editor Manufacturers' Record:

An iron bridge is to be built over Spring creek at this place. It is to be built by Collin county. Work will be in progress soon. W. D. PEARCE.

PALESTINE, TEXAS, March 21, 1887.

Editor Manufacturers' Record:

I have contract to build the court-house for Nacogdoches county. The cost will be from \$12,000 to \$15,000. It will be a brick building. D. N. DARLING.

Large Works to be Erected.

DECATUR, ALA., March 26, 1887.

Editor Manufacturers' Record:

The Oak Extract Company will erect here the largest works of the kind in the world. They extract the tanning qualities from oak wood, as well as from bark. Plant covers five acres; employs 150 men. Commence work in 30 days. W. E. FOREST.

Will Rebuild Mill.

BANDY, N. C., March 25, 1887.

Editor Manufacturers' Record:

Our saw mill was washed away. Our intention is to rebuild soon. WILSON & ROBINSON.

Will Erect an Ice Factory.

BOERNE, TEXAS, March 23, 1887.

Editor Manufacturers' Record:

Richard Croskey intends to start an ice factory in this town. P.

KEYSER, N. C., March 20, 1887.

Editor Manufacturers' Record:

I am running, in connection with J. T. Patrick, his experimental farm, and we expect to put in a shingle and corn mill, cotton gin, and possibly saw mill also at some time in the near future, neither of them on an extensive scale. R. M. CONCH.

WEBSTER, N. C., March 22, 1887.

Editor Manufacturers' Record:

We have signed contract to build courthouse at this place for \$11,400, with old building included. It is to be built of brick, 50x70 feet. We will commence work on it immediately. ELLIOTT & ELLIOTT.

HEBER, ARK., March 18, 1887.

Editor Manufacturers' Record:

The coal found near Heber will be developed by Dr. M. M. Hazle, of Cedar Rapids, Nebraska. J. R. B. MOORE.

Will Erect a Stave Factory in Tennessee.

MILWAUKEE, WIS., March 21, 1887.

Editor Manufacturers' Record:

I use a million and more of staves annually in my shops. I have come to the conclusion to locate somewhere in Western Tennessee; have not agreed on the place yet. CHAS. STOLPER.

Will Enlarge Mill.

GREENVILLE, S. C., March 23, 1887.

Editor Manufacturers' Record:

We have built tower to our mill, and will put in sprinklers and water tank for 10,000 gallons water. Will at once add 64 looms, and build brick addition, 40x40 feet, to our mill. HUGENOT MILLS.

Public Sale

OF LOTS IN

South Pittsburg, Tenn.

The South Pittsburg City Company has decided to begin the sale of their manufacturing, business and residence lots on

TUESDAY, MAY 10, 1887.

Special rates of fare on the railroads, and ample accommodations at reduced rates in the Hotels. For maps, descriptive pamphlets and terms of sale, address

G. C. CONNOR, Sect'y,
South Pittsburg, Tenn.

BUENA VISTA IRON PROPERTY,

—IN—
ROCKBRIDGE CO., VA.,

On the Shenandoah Valley and Richmond & Alleghany Railroads,
FOR SALE.

Two good locations for large Steel or Iron Furnaces; 11,500 acres in the tract; covers 5 miles of the Blue Ridge mineral belt; analysis of iron ores show from 50 to 60 per cent. of metallic iron; iron ore veins well developed, showing large quantities of good ore; flattering indications of manganese and tin; unusually good railroad facilities for reaching 4 or 5 large coal fields, affording decided advantages in procuring cheap fuel. Address,

C. F. JORDAN,
Green Forest, Rockbridge Co., Va.

DRAPER-RIDDLE LAND CO.

Anniston, Ala.

BUY AND SELL LAND

On most reasonable terms.

Any information concerning Anniston will be cheerfully given.

Stocks and Bonds Bought and Sold on Commission.

IRON ORES. LIME. MARBLE.
COAL. CEMENT. LUMBER.
Produced at Wilsonia.

Lawrason Levering,

WILSONIA, GRANT CO., W. VA.

Represented in Philadelphia by

J. W. SWEET, JR., 35 N. Seventh St.

HARD-WOOD TIMBER LANDS**WATER POWER FOR COTTON OR PAPER MILL.**

We have for sale several large and very valuable tracts of Hard-wood Timber Lands, situated on railroad convenient to Danville, Va., suitable for handle, spoke, wheel, carriage and wagon timber. Also good sites for the location of wood-working and other plants at Danville, Va. We also have for sale an exceedingly valuable one hundred horse water-power in the corporation of Danville, Va., specially adapted for Cotton or Paper Mills. Correspondence solicited.

RUFFIN & HAIRSTON, Real Estate Agents, DANVILLE, VA.

O. H. PARKER & CO.

Anniston, Ala.

BUY AND SELL

Real Estate, Stocks and Bonds

ON COMMISSION.

Correspondence solicited. Refer to First National Bank of Anniston. Advantageous Manufacturing Sites For Sale.

B. K. COLLIER & CO.**Investment Agents,**

HEAD OFFICE:
MONTGOMERY, ALA.

BRANCH OFFICES:

Birmingham, Ala., Decatur, Ala.,
Chattanooga, Tenn;
COAL, IRON, PINE and FARMING
Lands Bought and Sold.
MORTGAGES NEGOTIATED on Farm and City Property.
Refer to THE CORBIN BANKING CO., New
York City. Address all letters to Head Office.

D. W. K. PEACOCK,**Real Estate Agent,**

CARTERSVILLE, GA.

Minerals a Specialty.

Refers to THE HOWARD BANK, Cartersville, Ga.
J. W. RANKIN, Atlanta, Ga.

IRON AND COPPER.

FOR SALE.

Two valuable tracts of land near Norwood, on the Richmond & Alleghany Railroad, in Nelson county, Virginia. One tract of 38 3/4 acres lies in the copper belt. The land is good, well watered and well wooded. It is about one mile from Norwood Depot, R. & A. R. R. Indications of copper are very promising at several points on this tract, and from one of these veins about 100 tons yellow sulphuret of copper were taken in 1869-'70, and sold to the smelting works near Baltimore. The other tract of 35 3/4 acres is about half a mile from the R. & A. R. R., on both sides of the Buffalo ridge, showing good indications of copper on the north side, and an abundance of brown hematite iron ore on the surface along the south base of the ridge, near the railroad. Will be sold at a great sacrifice. I will be glad to answer all enquiries.

ALEXANDER BROWN,
Norwood P. O. Nelson county, Va.

Land Given Away

1 1/2 Miles West of

ANNISTON, ALA.

On Georgia Pacific and Anniston & Atlantic Railroads. Will give 4 acres to any plant requiring the employment of 75 to 100 hands.

John M. Caldwell, Anniston, Ala.

LEDBETTER & CO.

Land and Loan Association.

(INCORPORATED.)

Commission Dealers in Lands, Stocks and Bonds.**City and Mineral Property a Specialty.**

Capital Stock
\$100,000.

—REFERENCES:—

First National Bank, Anniston, Ala.
Col. Jno. M. McKleroy, Pres. Anniston City Land Co.

ANNISTON, ALA.

— CORRESPONDENCE SOLICITED. —

B. W. PAYNE & SONS

Box 1018, ELMIRA, N. Y.
107 Liberty St., N. Y. 10 S. Canal St., Chicago. Baltimore—Morton, Reed & Co.



Vertical, Stationary and Portable

ENGINES AND BOILERS

FOR EVERY DUTY.

We make the best and most reliable high-speed Automatic Engines for running Electric Light Plants. We guarantee the "Payne Automatic" to furnish same power as the ordinary Throttling Engine at one-third to one-half less fuel and water, doing the same work. It will pay you to send for our catalogue and prices before ordering elsewhere. We have got what you want, and low prices.

JARVIS PATENT FURNACE**FOR SETTING STEAM BOILERS.**

Economy of Fuel, with increased capacity of Steam Power. Like the Siemens Process of Making Steel, it utilizes the waste gases with hot air on top of the fire. Will burn all kinds of waste fuel without a blast, including Slack Coal, Sawdust, Logwood Chips, &c. Send for Circulars.

Jarvis Engineering Co.,

A. F. UPTON, Treas. and Gen'l Manager,
61 Oliver St., Boston, Mass.

SOUTHERN REFERENCES:

Eagle & Phenix Mfg. Company, Columbus, Ga.
Anniston Mfg. Co., Anniston Ala.
J. P. King Mfg. Co., Augusta, Ga.
Rose Mining Co., Charleston, S. C.
Maryland Pavement Co., Baltimore, Md.
Brush Electric Light Co., Baltimore, Md.
Eltrick, Matonca and Battersea Mfg. Co's.,
Petersburg, Va.
Raisin Fertilizing Co., Baltimore, Md.
Tanner & Delaney Engine Co., Richmond, Va.
Sibley Mills, Augusta, Ga.

Graniteville Mfg. Co., Graniteville, S. C.
Charleston Bagging Co., Charleston, S. C.
P. H. Mayo & Bros., Richmond, Va.
Phosphate Mining Co., Beaufort, S. C.
Brush Swan Electric Light Co., Norfolk, Va.
Columbus Ice & Refrigerator Co., Colum-
bus, Ga.
Lenoir Manufacturing Co., Lenoir, East
Tennessee.
Vancelease Mill, Graniteville, S. C.
Charleston Electric Light Co., Charleston, S. C.

HAMILTON WORKS.**WILLIAM TOD & CO.**

YOUNGSTOWN, OHIO,

SOLE BUILDERS OF THE

PORTER-HAMILTON ENGINE

50 to 500 Horse-Power. Modern design. PLAIN, STRONG, EFFECTIVE, ECONOMICAL.
COSTS LESS THAN ANY OTHER FIRST-CLASS ENGINE. Send for Photograph.

BLAST FURNACE ENGINES ON HAND.

ALSO A STOCK OF OTHER ENGINES (our make.) Prices and description on application.

BOILERS

MAHONING BOILER WORKS
ESTABLISHED 1863.
PIPES, STACKS, BEAMS, ROOF TRUSSES,
BLAST FURNACES & ROLLING MILL WORK.
WM. B. POLLOCK & CO. YOUNGSTOWN, OHIO.

Build AND Repair Your Machinery

BY USING

Engine Lathes, Planers,
Chucking Lathes, Hand Lathes,

—AND—

MACHINE TOOLS GENERALLY

MANUFACTURED BY

LATHE & MORSETOOL CO

Worcester, Mass., U. S. A.



Established 1845

SEND FOR
CATALOGUE.

WRIGHT & ADAMS COMPANY,

QUINCY, ILLINOIS.

BUILDERS OF

AUTOMATIC CUT-OFF ENGINES

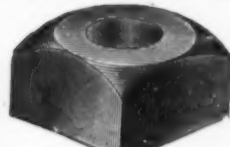
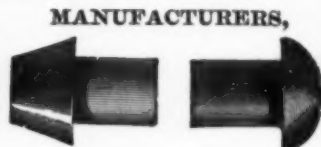
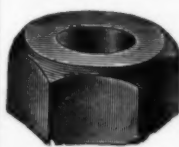
Derrick Engines, Double Drums, with Friction, Band Brakes & Winch Heads.

REVERSING ENGINES, SINGLE DRUM, WITH BRAKES, SUITABLE FOR
MINES AND RAPID HOISTING.

CORRESPONDENCE RESPECTFULLY SOLICITED. CATALOGUE SENT ON APPLICATION.

HOOPEES & TOWNSEND,

MANUFACTURERS,

**KEYSTONE BOILER RIVETS,**

Cold Punched, Chamfered, Trimmed and
Drilled Square and Hexagon Nuts.

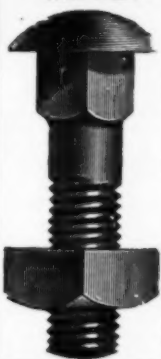
Finished and Case-Hardened Steel Hexagon Nuts.

BRIDGE RODS and RIVETS.

Builders' **IRON Work.**

TANK and COOPERS' RIVETS.

PHILADELPHIA, PA.

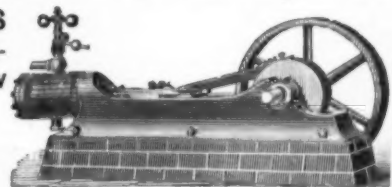
**SKINNER ENGINE CO. Erie, Pa.**

Awarded THREE GOLD MEDALS
by the World's Industrial and Cot-
ton Centennial Exposition of New
Orleans, La.

More than 2000 in Use.

Manufacturers of Portable and Stationary Engines and Boilers,
including the well known Skinner Portable return flue boiler.

Send for **ILLUSTRATED CATALOGUE AND PRICES.**

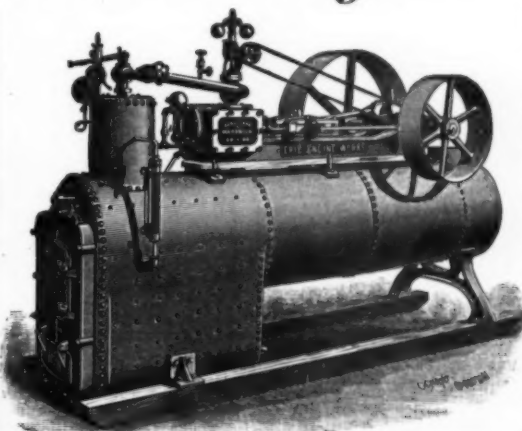
**Erie Engine Works.**

Cleveland & Hardwick,
ERIE, PA., U. S. A.

Stationary,
Detached,
Portable,
Semi-Portable,
Agricultural,

Portable,
Stationary,
Vertical,

Engines. Boilers.

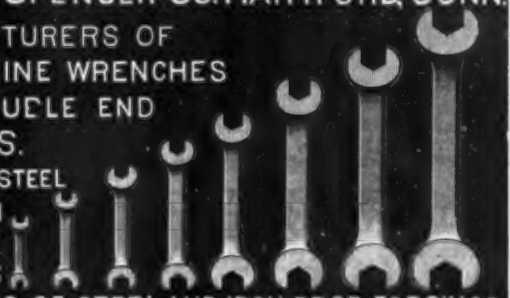


Send or Catalogue and Prices.

THE BILLINGS & SPENCER CO. HARTFORD, CONN.

MANUFACTURERS OF
STANDARD MACHINE WRENCHES
SINGLE AND DOUBLE END
IN 16 SIZES.

DROP FORGED OF BAR STEEL
TAKING NUTS FOR 1/4 INCH
UP TO AND INCLUDING
NUTS FOR 1 1/4 INCH BOLTS
AND ALL DESCRIPTIONS OF STEEL AND IRON DROP FORGINGS.

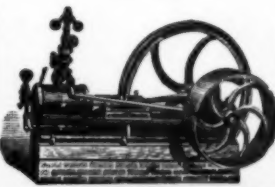


FOR THE LOWEST-PRICED FIRST-CLASS

Engines and Boilers

ADDRESS

GEO. W. TIFFT, SONS & CO.
Buffalo, N. Y.



5 to 500 H. P. Special stock sizes 5 to 50 H. P., both Sta-
tionary and Semi-Portable.

CORRESPONDENCE SOLICITED.

MENTION THIS PAPER.

LEETONIA BOILER WORKS CO.

MANUFACTURERS OF

Locomotive, Flue and Portable

BOILERS

BLAST FURNACES, PRISON WORK,

Oil Tanks and Sheet Iron Work. Repairing Promptly Attended to. Write for Estimate.
LEETONIA, OHIO.**M. C. BULLOCK MFG. CO.**

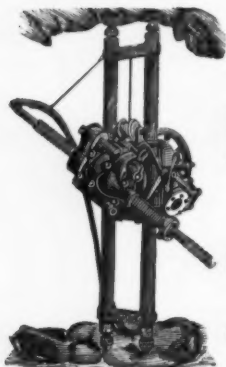
MANUFACTURERS OF

Diamond Pointed Rock Drills,

STEAM ENGINES and BOILERS,

Lane's Patent Band Friction Hoisting Machinery,

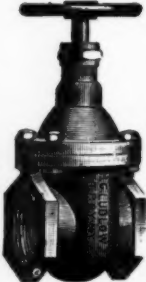
FOR MINES, BLAST FURNACES, DOCKS, ETC.

STRAIGHT LINE ENGINES.Address, WORKS:
GENERAL OFFICE: 156 and 158 Lake St., CHICAGO, U. S. A.
Lake and Tallman Ave.,**Ludlow Valve Manfg. Co.**

Office and Works:

938 to 954 River Street, and 67 to 83 Vail Avenue,

—TROY, N. Y.—

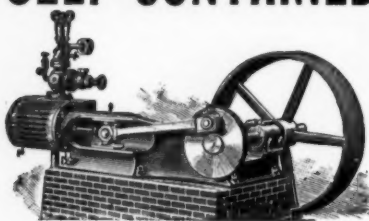
**VALVES**
Double and Single Gate, 1/4 inch to 48 inch—outside and inside
Screws, Indicators, etc., for
Gas, Water, Steam, Oil.
Send for Circular.

Also Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves

SELF-CONTAINED STEAM ENGINES.

Stationary or Semi-Portable.

High Standard Maintained. Prices greatly Reduced. Write for New Illustrated Catalogue No. 25

CHANDLER & TAYLOR, Indianapolis, Ind.
**ENGINES, SAW MILLS, AND
DRAIN TILE
MACHINERY A SPECIALTY.****THE MIDVALE STEEL CO.****TIRES and AXLES**

OF EVERY DESCRIPTION.



CRUCIBLE AND OPEN HEARTH STEEL.

Works & Main Office:

Hicestown, Philadelphia, Pa.

BRANCH OFFICE:

223 Walnut St., Philadelphia, Pa.

WM. SELLERS & CO., Incorporated.

Engineers and Machinists, PHILADELPHIA, PA.

Improved Machine Tools for Working Iron and Steel.SHAFTING, PULLEYS, HANGERS, Etc., for Transmitting Power.
IMPROVED SELF-ADJUSTING INJECTOR OF 1876, started, stopped and regulated as to capacity by one lever.**FIXED NOZZLE AUTOMATIC INJECTOR OF 1885.**Either a lifter or non-lifter; no extra valves or fittings required; tubes can be removed without disturbing pipe connections; is perfectly automatic in its action; requires no especial manipulation to operate it.
Descriptive pamphlets and prices furnished on application to

Philadelphia Office, or to New York Office, 79 Liberty Street.

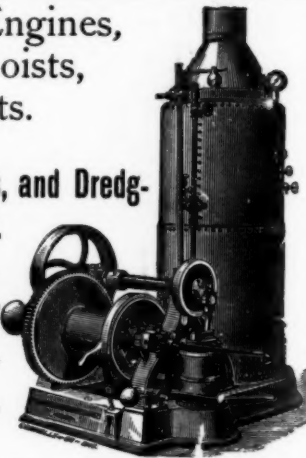
BACON Winding Engines,
Furnace Hoists,
Mine Hoists.

(With or without Boilers.)

"Mining Plants," Concentrating Works, and Dredging Machinery Furnished Complete.

COPELAND & BACON,

85 Liberty Street, New York.

FAIRBANKS & CO., Agents, Philadelphia, Pa.
Pittsburgh, Pa.
Buffalo, N. Y.References: { Croton Magnetic Iron Mines, Brewster's, N. Y.
Crown Point Iron Co., Crown Point, N. Y.
Belvidere Iron Co., 32 Broadway, N. Y.
Sea Island Chemical Co., Beaufort, S. C.**"STEAM"** A valuable book for every
Steam user and Engineer,

published for FREE DISTRIBUTION by

THE BABCOCK & WILCOX CO.,

Manufacturers of

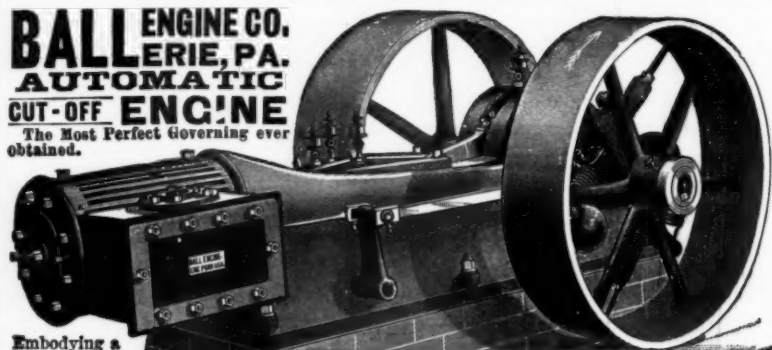
WATER-TUBE BOILERS,

107 Hope St., GLASGOW.

39 Cortlandt St., NEW YORK

**BALL ENGINE CO.
ALLERIE, PA.
AUTOMATIC
CUT-OFF ENGINE**

The Most Perfect Governing ever obtained.

Embodying a new system of
**ABSOLUTE
REGULATION**
against change of load and boiler pressure.**WE CHALLENGE THE WORLD**

on good regulation. Only Engine which Absolutely Holds to constant speed under all changes of load. An indispensable feature.

Send for Circular L.

CLEVELAND FLUE-CLEANER MANUFACTURING CO.

Forcing a spiral jet of steam entire length of tube.

SIZES TO FIT
ANY BOILER,
with 1 in. to 16 in. TUBESA & D
PATENT

The old reliable and most economical cleaner in the market. It has no equal. Satisfaction Guaranteed. Liberal Discount to Dealers. Send for Circular and Price List of Cleaner and Hose.

46 Power Block, CLEVELAND, OHIO.

CLEVELAND WHEEL AND FOUNDRY WORKS.

MAHER & BRAYTON, Proprietors.

—MANUFACTURERS OF—

Car, Engine, Truck and Tender Wheels, Machinery, Railroad and Rolling Castings,

Also, CHILLED IRON RAILROAD FROGS, (Any Angle),

AND STREET RAILROAD TURNOUTS.

Office, No. 20 Carter St., - - - CLEVELAND, O.

THE OLDEST. THE LARGEST. THE BEST.

The Best of Testimonials from every State and Territory.

All Kinds **Iron Roofing and Corrugated Iron.****PORTER IRON ROOFING CO.**
CINCINNATI, OHIO.

THE SAGENDORPH
IRON ROOFING
AND CORRUGATING CO.
12-14-16 & 18. EAST 2ND ST.
CINCINNATI, O. U.S.A.

CEILINGS, AWNINGS,
WINDOW & DOOR CAPS,
SIDING, GUTTERS,
& CORNICES.
OBELISK PAINT & CEMENT

SHEET METAL IN ANY FORM
MADE FROM
BLACK PAINTED, GALVANIZED OR
KALAMEIN IRON.

OLD STYLE
V CRIMPED.

IMPROVED
SELF
CLEATING
STANDING SEAM

IRON CLAPBOARDS
METAL CLEAT
TWILLED
CORROGUY

1/4 IN. CORRUGATION
1/2 IN. CORRUGATION
3/4 IN. CORRUGATION
2 1/4 IN. CORRUGATION

SEND FOR
ILLUSTRATED CATALOGUE
SAMPLES &
PRICES

Cambridge Roofing Company,

—MANUFACTURERS OF—

CROWL'S PATENT STANDING SEAM,Plain Rolled, Corrugated and Crimped Edge,
Roofing, Siding and Ceiling. Made of Steel and Charcoal Iron; awarded
first medal by the New Orleans Exposition.

CAMBRIDGE, - - - OHIO.

SYKES IRON ROOFING CO., NILES, O.SYKES'
IMPROVED
Best Roof in the
World.
Suitable for all
classes of
Buildings.
Easy Put On.All my Iron is
Re-Rolled and
Box Annealed,
well Painted on
both sides with
Best of Paint
and Pure Lin-
seed Oil.

Send for Circular and Price List, and mention this Paper.

OILS for WOOLEN MILLS a Specialty.

Established 1832.

WM. C. ROBINSON & SON,

MANUFACTURERS OF AND WHOLESALE DEALERS IN

OILS!

217 (Old No. 81) South Street,

BALTIMORE.

ELAIN OIL. Always satisfactory. Will
scour out perfectly in
any water.**LANA OIL.** A very good oil, but does
not scour out as well as
Elain in very hard
water.**OVEJA OIL.** The best Mineral Wool
Oil made. Gives
satisfaction to our
trade who use it.
Has a very good
body, and scours
well for a Mineral
Oil.

WE ALSO CARRY IN STOCK:

B. W. SPERM OIL,
N. W. SPERM OIL,
PRIME LARD OIL,COLOPHINE CYLINDER,
COLOPHINE ENGINE,
COLOPHINE SPINDLE,PARAFFINE,
LUBRICATING,

AND ALL OTHER KINDS OF OIL.

Correspondence Solicited and Samples Forwarded, if desired.

Record Printing House,Fine Cut Work
A Specialty.Cor. Exchange Place
and Commerce St.

IRON
ROOFING
SIDING, CEILING,
ARCHES AND LATH.
CINCINNATI
CORRUGATING CO.
CINCINNATI, O.
SEND FOR ILLUSTRATED CATALOGUE.

CORRUGATED

CRIMPED

MANUFACTURERS OF

GLOBE**"STANDING SEAM"**
IRON ROOFING.

Excelstor

V-Crimped

IRON ROOFING.

READY-ROLL

CAPPED ROOFING.



Corrugated Iron,

All Desired Gauges and
Sizes.

Painted,

Calaminated,

Galvanized.

Send for our de-
scriptive and illus-
trated catalogue.PRICES and ESTIMATES
promptly furnished.

CRIMPED & CORRUGATED
IRON ROOFING,
SIDING, CEILING, METAL
SHINGLES.
W.G. HYNDMAN & CO.
SEND FOR CIRCULAR & PRICES
CINCINNATI, O.

HOLTON IRON ROOFING CO., NEW LISBON, O.Manufacturers of
ROOFING,
SIDING,
CEILING, & C.Millions of feet in
use. Our work is
second to none.
Specially made of
the best materials
and construction.

Agents Wanted Everywhere.

Information Furnished on Application.

CANTON IRON ROOFING CO., CANTON, OHIO,

SUCCESSORS TO T. C. SNYDER & CO., MANUFACTURERS OF

ROOFINGCheaper than Shingles.
Fire and light-
ning proof. Made
of best refined char-
coal iron, sheet steel
and calaminated iron.Corrugated Iron
Roofing and Siding,
Beaded Iron Ceiling
and Siding, Crimped
Edge Roofing and
Siding, Roof Paint,
Roofers' Paper, &c.

Send for Catalogue, Price List and Samples.

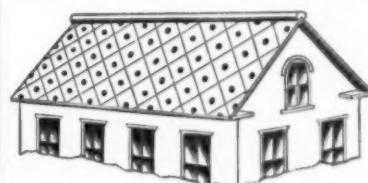
GARRY IRON ROOFING COMPANY,Largest manufacturers of
Iron Roofing in the world.

Manufacturers of all kinds of

IRON ROOFING,Crimped and Corrugated Siding,
Iron Tile or Shingle.Fire-Proof Doors, Shutters, Iron
frames, for roofs, buildings, &c.**IRON ORE, PAINT****AND CEMENT.**

152-158 Merwin Street,

CLEVELAND, O.

Send for Circular and Price
List No. 99.**BEST ROOF**

In the World is the Montross Patent

Metal Shingles.

Send for Circulars and Price-Lists Free.

E. VAN NOORDEN & CO.,

383 Harrison Ave., Boston, Mass.

STEEL
CASTINGS

FROM 1-4 to 15,000 lbs. WEIGHT.

True to pattern, sound, solid, free from blow-holes, and
of unequalled strength.Stronger and more durable than iron forgings in any
position or for any service whatever.40,000 CRANK SHAFTS and 30,000 GEAR WHEELS of
this steel now running prove this.

CRANK SHAFTS and GEARING specialties.

STEEL CASTINGS of every description.

Send for Circulars and Prices to

—CHESTER STEEL CASTINGS CO.—

Office, 407 Library Street, Philadelphia.

Works, Chester, Pa



G. A. Crosby & Co.
MANUFACTURERS OF
Presses, Dies,
AND
Special Machinery
FOR
Sheet Metal Workers.
259, 261 & 263
RANDOLPH ST.
CHICAGO, ILL.



THE WESTINGHOUSE Incandescent Electric Lighting System

For CENTRAL STATIONS and FACTORIES.

The Westinghouse Automatic Engines,
"STANDARD" and "JUNIOR."

SMITH-VAILE PUMPS
AND
Cotton Seed Oil Machinery.

Address all communications for the SOUTHEAST to

D. A. TOMPKINS & CO.
Engineers and Contractors,
CHARLOTTE, N. C.



Atlanta Saw Works

MANUFACTURERS OF EVERY VARIETY OF

SAWS

AND DEALERS IN

Saw Mill Supplies.

Special attention given to Repairing.

L. Power & Co's Celebrated Wood-Working Machinery.

Large and well-selected stock at low prices and on liberal terms. Write for catalogue.

ATLANTA, GA.



The **BEST CORN MILL**
IN AMERICA!

It is a broad assertion, and we mean just what it implies, and nothing short of it. It will make better meal, grind faster, hold the dress longer, and in every way the best proportioned and best looking mill on the market.

MILLSTONES for all purposes, and at prices that fully meet sharpest competition.

FLOUR MILLS—Portable and Stationary outfits complete for \$500.

The **Simplest WATER WHEEL** on the market.

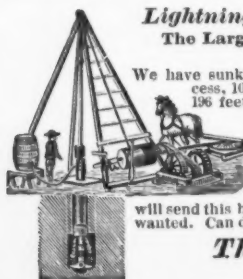
The **Most Perfect SAW MILL**, Simple, and pronounced by all The Best.

SHAFTING and GEARING of All Kinds.

Be sure to send for Circulars and Prices before buying.

A. A. De LOACH & BRO.

Founders and Machinists. **ATLANTA, GA.**



Lightning Well Sinking Machinery.
The Largest Manufacturers of Well Sinking and Prospecting Tools.

We have sunk 500 feet in 10 hours with the revolving process, 100 feet in 40 minutes by the jetting process, and 125 feet in 10 hours without removing the tools from the well by the hydraulic process. We have averaged 1 foot in 10 minutes, to a depth of 650 feet, with our diamond-pointed rock drills. We issue an encyclopedia of well-sinking appliances, containing 700 engravings, illustrating and describing all the practical tools used in well sinking. We also manufacture wind mills, artesian pumping engines and appliances. We will send this book on receipt of 25 cents for mailing. Drillers and agents wanted. Can direct purchasers to places where wells are wanted. Address

The American Well Works,
AURORA, ILL., U. S. A.



DEAN BROS' STEAM PUMP WORKS.



PUMPING MACHINERY
FOR ALL PURPOSES.

INDIANAPOLIS, IND.

SEND FOR CATALOGUE
AND PRICES.

WHY THIS IS PUT HERE!
For the reason that if you are interested in raising water or other liquids by steam power, we wish to call your attention to the
NEW PULSOMETER,
THE CHEAPEST AND BEST STEAM PUMP IN THE MARKET. PRICES LOWER THAN ANY OTHER.
More Efficient, Simple, Durable, and more Economical, both as to running expenses and repairs, than any other Steam Pump.
For Mining, Railroad or Steamboat use, Paper Mill, Chemical or Gas Works, Tannery, Brewery or Sugar Refineries, Draining Quarries, Cellars or Plantations, Irrigating or Hydraulic Mining.
Call or write for our new 36 page illustrated Descriptive Book containing Full Particulars, Reduced Net Prices, and hundreds of A-1 Testimonials. Mailed Free.
Pulsometer Steam Pump Co., 83 John Street, N. Y.

STEAM PUMPS.
VALLEY MACHINE CO., EASTHAMPTON, MASS.

BLAKESLEE MANFG. CO.
67 WASHINGTON ST.,
DU QUOIN, ILL.
STEAM PUMPS
FOR ALL PURPOSES.
SEND FOR CATALOGUE

OILS!

PEERLESS OIL COMP'Y,
Manufacturers of Machinery, Engine AND Cylinder Oils,

OFFICE:

WAITE & BRENNAN,

No. 425 HUGHES STREET,

BALTIMORE, MD.

THE LONG & ALLSTATTER CO. HAMILTON, OHIO.

Double, Single, Angle-Bar, Gang, Horizontal, Twin, Boiler, Spacing, Gate, Multiple, BELT and STEAM-DRIVEN
Punches and Shears,
Over 300 sizes.
ALSO,
Power Cushioned
HAMMER.
Heavy Double Machine. Send for New Catalogue. Heavy Single Machine.

The Little Giant Excavator.

—A LONG FELT WANT SUPPLIED.—

For DITCHING, EXCAVATING

Loading Wagons

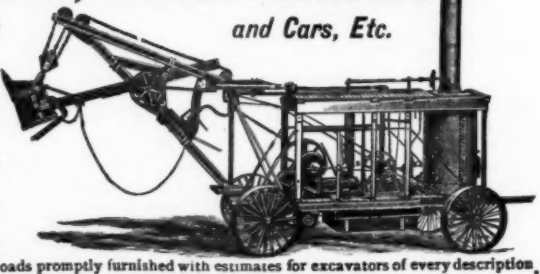
and Cars, Etc.

50 TO 100 PER CENT. SAVED
IN LABOR.

Capacity of Machine 500 to 700 cubic yards per day. Self propelling. Easily moved. Being built entirely of steel, is both strong, light and a very substantial machine. Can be used on flat-boat for dredging ditches, irrigating or digging canals. Contractors and railroads promptly furnished with estimates for excavators of every description.

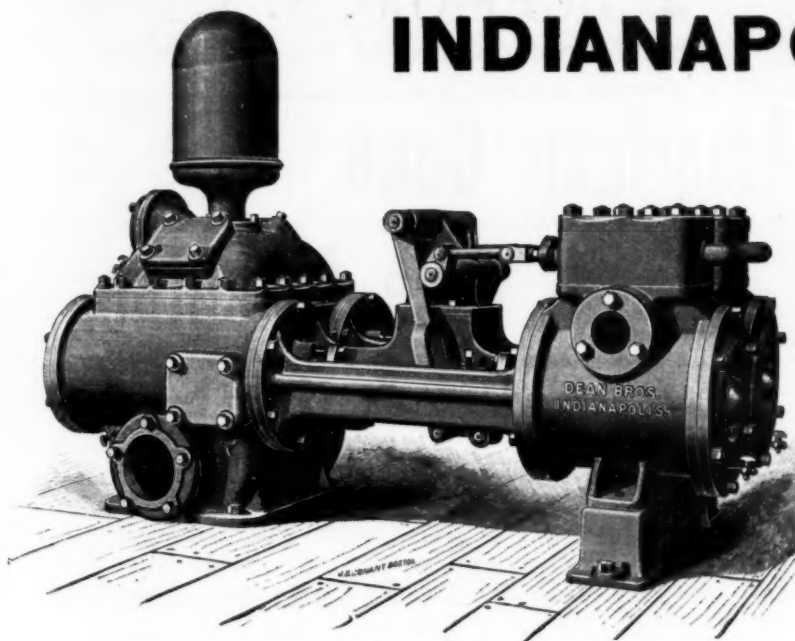
Address **VULCAN IRON WORKS, Toledo, Ohio.**

Buy "THE NEW SOUTH."

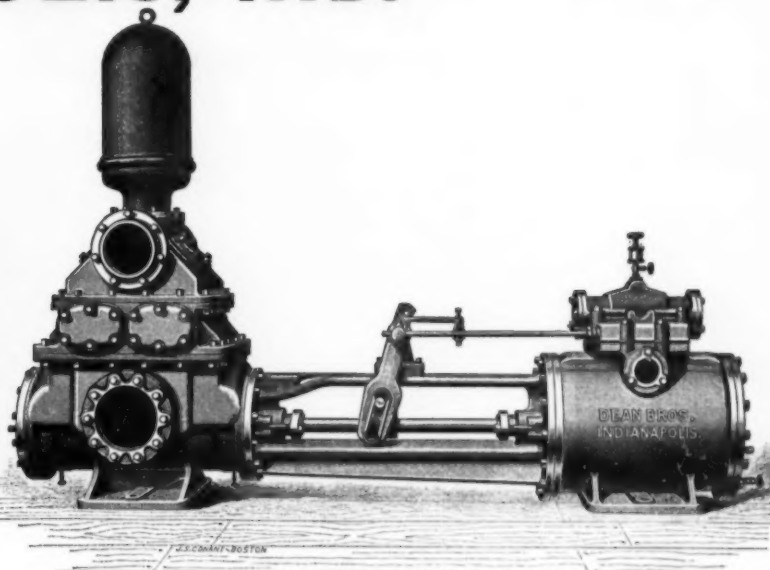


DEAN BROTHERS

INDIANAPOLIS, IND.

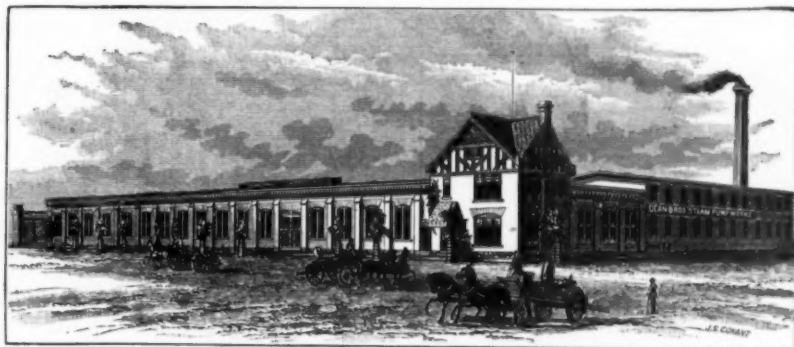


Duplex Pump.



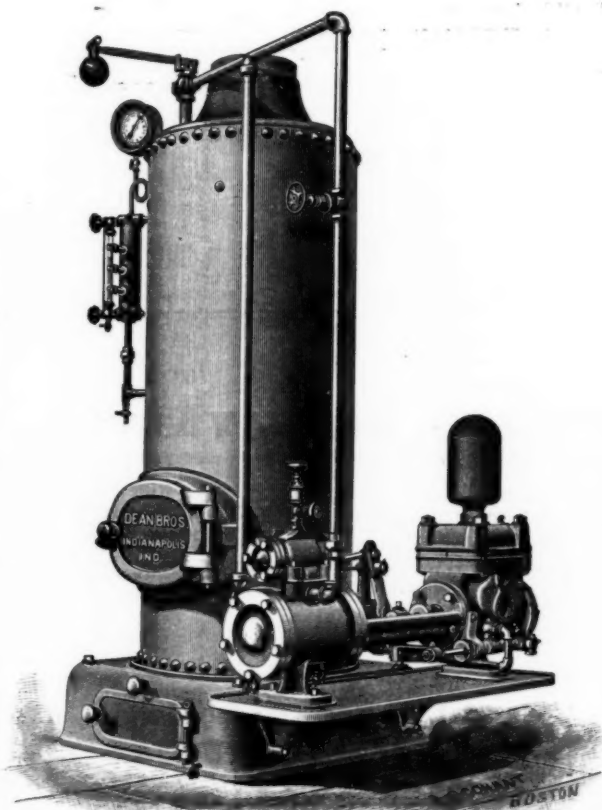
No. 11 Fire Pump.

Boiler Feeders.
Fire Pumps.
Air Pumps.
Condensers.
Deep Well Pumps.
Distillery Pumps.
Fly Wheel Pumps.



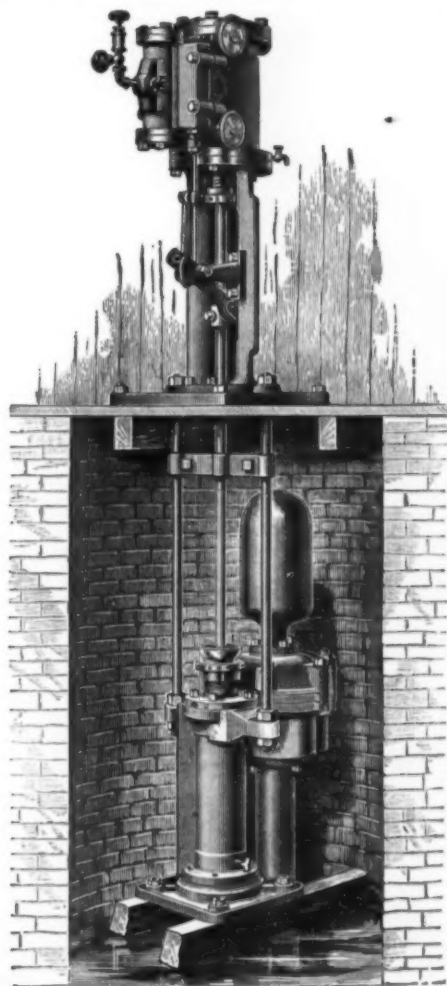
Works Cor. of Madison Ave. & Ray St., Indianapolis, Ind.

Double Plunger Pumps.
Tank Pumps.
Quarry Pumps.
Mine Pumps.
Sewerage Pumps.
Irrigating Pumps.
**PUMPS FOR EVERY
PURPOSE.**



Combined Pump and Boiler.

SEND FOR
NEW
ILLUSTRATED
CATALOGUE.



Vertical Pump.

Dean Brothers' Steam Pump Works, INDIANAPOLIS, IND.

THE SARGENT MFG. CO.

Specialties.

NECESSITY, COMFORT, LUXURY.



Fig. 1.



Fig. 2.



Fig. 3.

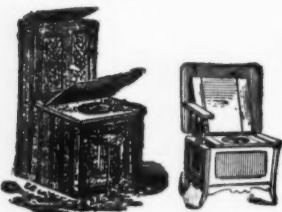


Fig. 4.



Fig. 5.

1. **Sargent's Monarch, Empress and Premier Reclining Chairs.** These Chairs are the best of their class made in the world, having an almost endless variety of positions, made of the best material, and are upholstered to insure perfect rest. They range in price from \$35.00 to \$120.00. We also make a large variety of other styles, including our Favorite, Automatic Nos. 65, 85 and 103, which range in price from \$10.00 to \$60.00.

2. **Sargent's Invalid Rolling Chairs.** We represent but two of our numerous styles, which include all kinds, for house or street use, reclining and rigid, cane and upholstered.

3. **Sargent's Solid Comfort Back-Rest and Folding Bed Tray.** Treasures for invalids. Prices of Back-Rest: No. 1, plain, \$4; No. 2, with arms, \$5; No. 3, with arms and head-rests, \$6. Prices of Trays: No. 1, 15x25 inches, \$3; No. 2, 17x28 inches, \$4.

4. **Earth Closets.** Its merits are incontestably established by 16 years' trial. As a sanitary measure as well as a convenience, it should be adopted in every country house.

5. **Sargent's Sanitary Arm Commodes** are absolutely orderless. They have a double seat; broad arms that adjust independently; a metallic enameled pail with flexible rubber and metallic covers.

NOTE.—We make a specialty of Invalids' Appliances, and aim to supply every known device for the alleviation of suffering. Send for our 80-page Illustrated Catalogue.

SARGENT MFG. CO.

814 and 816 Broadway, NEW YORK

WIER & WILSON

DIRECT REPRESENTATIVES:

HUBBARD & CO.	Axes, Shovels, Hoes and Saws.
AMERICAN SCREW COMPANY,	Screws, Bolts, Wire Nails, &c.
A. FIELD & SONS,	Tacks, and Nails.
WHEELING HINGE COMPANY,	Wrought Goods, Butts, &c.
OLIVER BROTHERS & PHILLIPS,	Heavy Hardware.
THE SHELTON COMPANY,	Philadelphia Carriage Bolts.
J. P. TOLMAN & CO.	Braided Sash Cord.
JOHN SOMMERS' SON,	Faucets.
NICHOLSON FILE CO.	Files.
HARTFORD HAMMER CO.	Hammers and Sledges.
THE HENRY O. HART MFG. CO.	Screen Frames, Lull & Porter, Blinds, Spring Hinges, &c.
LAWSON & BRENZER,	Forks.
HOLROYD & CO.	Stocks and Dies.
BAKER CHAIN & WAGON IRON MFG. CO.	Wagon Hardware, Links, Rings, &c.

Office, No. 14 W. German Street,

CHARLES H. WIER.
JOHN K. WILSON.

BALTIMORE, MD.



Manufacturers of COVERT'S Celebrated Harness Snaps, Swivel Snaps, Open Eye Bit and Chain Snaps, Snap and Thimble for Horse and Cattle Ties; ROPE GOODS, consisting of Web and Rope.



Also, Leather Horse Ties, Etc. Breast Chains, Heel Chains, Chain Cow Ties, Halter Chains, Martingale Chains, Rein Chains, Post Chains, Butt Chains, Back or Cart Chains, Log Chains, Stake Chains, Trace Chains. Also, STUD, CABE AND COIL CHAIN. CHAINS OF ALL KINDS MADE FROM SAMPLE OR DRAWING.

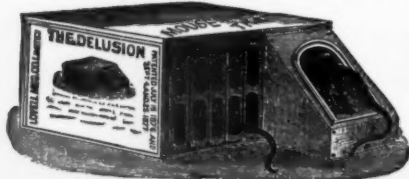
PATENT ADJUSTABLE SOLDERING IRONS.

Send for Illustrated Catalogue and Price-List

DELUSION MOUSE TRAP

—52,932 Sold in One Month.—

THE ONLY SUCCESSFUL
Self-Setting TRAP.



LOVELL MANUFACTURING CO., Limited, ERIE, PA.

"The mouse goes in to get the bait
And shuts the door with his own weight,
And then he jumps right through a hole
And thinks he's out; but, bless his soul,
He's in cage, somehow or other,
And sets the trap to catch another."

The Geo. L. Squier Mfg. Co.

BUFFALO, N. Y.

Sole Manufacturers of the Celebrated

American Cane AND Rice Machinery.

Eighty Sizes of Cane Mills, Vacuum Pans and Pumps,

Bone Coal Filters and Kilns,

Mixers,

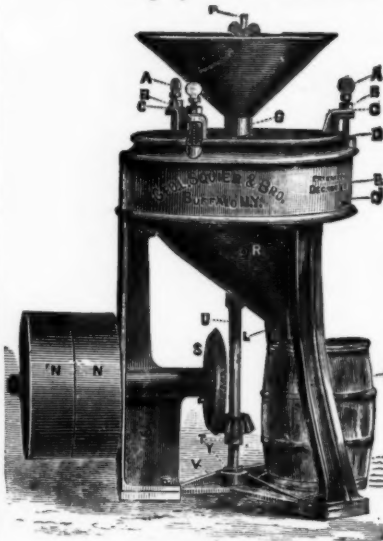
Centrifugals, Evaporators, etc.

Rice Threshers, Hullers, Separators, Scourers
AND POLISHERS.

Engines, Horse-Powers, Boilers, etc.

THE HERCULES WIND ENGINE,

The Most Reliable, Durable and Effective Wind
Engine for Power and Pumping purposes ever
placed upon the market. Send for
Catalogue.



RICE HULLER No. X.

Information and prices given on all
classes of machinery. Correspondence
solicited. Premiums awarded at World's
Exposition, New Orleans.



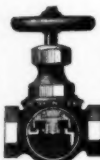
ELMIRA, N. Y.
MANUFACTURERS OF THE
CRONK'S PATENT

WIRE CUTTER,

Bender and Plier and Hog Ringer Combined.

Specially adapted for use on Wire Fences; also best in the world for TINNERS' use. Patent Allowed.

JENKINS BROS. VALVES



Stand at the head, are specified by architects, used in the principal public buildings, and always referred to by steam fitters when the best is called for. The Valves contain all the late improvements—using the genuine Jenkins Disc. Don't be deceived into buying a cheap and inferior valve, using a worthless disc, but insist on having Jenkins Bros. Valves, containing a Jenkins Disc and the only disc that will stand high pressure of steam. By so doing you avoid paying for the experiments of others and get the best.

JENKINS BROS., 71 John Street, N. Y.; 105 Milk Street, Boston;
13 South Fourth Street, Philadelphia.

BUY "THE NEW SOUTH."

Price \$2.50. Handsomely Bound in Cloth.

MANUFACTURERS' RECORD Co., Publishers.

HEAVY STEEL

—AND—

IRON PLATES

—AND—

CYLINDERS

FOR SCREENING

Ore, Coal, Stone, Phosphates, Etc.

REVOLVING SCREENS,**ROUND AND HEXAGON.**

FOR

BRASS
PERFORATED
IRON**GRIZZLIES**

—FOR—

Placer**Mining.****STAMP****Battery Screens**

Of all Kinds and Sizes.

MINING SCREENS

For All Kinds of Ores.

Cotton-Seed Oil Mills, Rice Mills, Sugar Houses, Distilleries,**PHOSPHATE AND FERTILIZING WORKS,****Elevators, Malt Kiln Floors, Grain Dryers, Threshers, Separators,**

Corn Shellers and all kinds of Grain Cleaning Machinery; also for Mining and Concentrating Works; Coal, Coke and Ore Screens. Gas and Water Works; Paper, Woollen, Flour and Oil Mills; Filters, Strainers, Ventilators, Etc..

Special attention given to work for Railroads and Car Builders. Perforated Tin and Brass of all sizes. Iron, Steel, Copper, Brass and Zinc punched to any size and thickness required.

CORRESPONDENCE SOLICITED.

SATISFACTION GUARANTEED.

The HARRINGTON & KING PERFORATING COMPANY,

Main Office and Works, 224 and 226 North Union Street, Chicago.

BROWN & KING, MANUFACTURERS OF COTTON MILL SPECIALTIES.

Roller Covering, Loom Pickers and Strapping.

Dealers in Roller Coverers, Stock and Tools; Cotton and Woolen Mill Supplies.

Full Line "Hick's" United States Standard Ring Travelers, Mill Wire Goods, Spring Cotters, Belt Hooks, Lacing, &c., kept constantly on hand.

Wrought Iron Pipe Fittings and Brass Goods. Southern Agents for the celebrated "B. C. & D. Oak Tanned Patent Lap Belting, Galvin Compound Wedge Gate Valve Imhauser's Watchman Time Detectors, Diamond Emery Wheel Machine Co., &c.

Office and Salesroom No. 62 S. Broad Street. ATLANTA, GA.

THE RICHMOND Fire Alarm, Police and Patrol TELEGRAPH SYSTEMS.

Adopted by the Most Progressive Cities in the United States.

MANUFACTURED BY

THE RICHMOND FIRE ALARM CO.

Correspondence Solicited. RICHMOND, IND. Send for Catalogue.

NIAGARA STAMPING & TOOL CO.

MANUFACTURERS OF

Tinners' Machines & Tools,

—FOR WORKING SHEET METALS, &c.—

Fruit Can Dies and Tools.

Cannery's Outfits.



Squaring & Circle Shears, Presses, &c.

Superior, Cor. of Randall St., Buffalo, N. Y.
Write for our Catalogue and Price-List. Please mention this paper when writing.

COLEMAN HARDWARE CO.

Sole Manufacturers of the

SHUMARD Sash Balance.

NO WEIGHTS, NO CORDS, NO PULLEYS,
NO BOX FRAMES.

Balances the Sash perfectly, and runs as Easily
as Weights. Easily applied to any WIN-
DOWS, and is Simple, Durable, Re-
liable and Practical in
Every Way.

We make many other Hardware Specialties, and mention
particularly the now famous

Nickel Barn Door Hangers,

—WITH—

Ribbed Bessemer Steel Frames, Hot Bent.

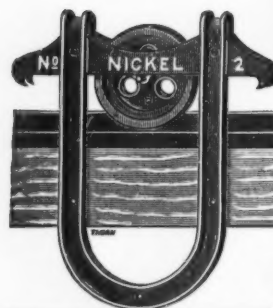
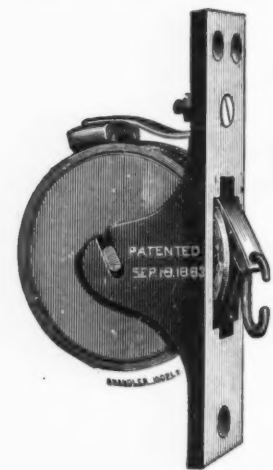
Guaranteed Satisfactory to user. Send for Circulars and Prices.

COLEMAN HARDWARE CO.

(Formerly OHIO BUTT CO.)

55 Dearborn St., - CHICAGO, ILL.

Please mention this paper.



LOOK THROUGH the advertising pages carefully. They contain the announcements of the largest and most reliable houses in the country manufacturing and dealing in machinery of all kinds, mill, factory, mine and railroad supplies, hardware, roofing, builders' material, etc. If in need of anything herein advertised, write to the advertisers for catalogues, prices, &c.

Business Chances.

WANTED.—A practical pattern maker, capable of making ordinary drawings, with some experience in millwrighting and machine work; also, a practical man capable of selling and erecting wind-mills. Address, Progress Engine & Machine Works, Summerfield, Baltimore county, Md.

WAGON FACTORY.—Rome, Ga., wants a wagon factory. Parties there will take \$5,000 of the capital stock and will donate a site. White oak, hickory, and all the hardwoods and long-leaf pine easily obtained and accessible by rail and water. Parties accepting must come with new machinery. Address, W. P. Simpson, Prest. Rome Iron, Land & Improvement Co., Rome, Ga.

COTTON PRESS.—I have completed model of a cotton press which possesses substantial merit over any press ever put on market. The advantages are economy in packing power, dispatch of work and ease of management. Not being able to handle it, I desire to dispose of the invention. Correspondence solicited. A. H. Harrington, Harrington P. O., N. C.

FREE SITES.—I will give a free site to any parties desiring to erect an iron furnace or any manufacturing enterprise, situated on east side of New river and on Norfolk & Western Railroad between junction with Pocahontas coal road and Central. W. R. Wharton, New River Depot, Va.

WANTED.—A man capable of selecting, preparing and rolling in plug tobacco factory. Must be sober and bring good references. Address C. Whittier, Whittier, N. C.

FORTUNE HERE.—Owing to my health, I wish to sell rights in my New Era Washing Machine. Best out; children work it easily; very simple; pleases every one. Large sizes for laundries. W. L. G. Appleby, Germantown, Md.

WANTED.—A partner with \$10,000 to manufacture and sell a patent medicine not represented in the South. Open field and an opportunity to establish a large and valuable business. Address T. E. H., P. O. box 98, Atlanta, Ga.

WANTED.—A partner with \$2,500 in established photo-engraving business. Advertiser is thoroughly experienced, and will teach business to incoming partner. Address "Photo-Engraving," care box 98, Atlanta, Ga.

WANTED.—A man with a small capital and thoroughly acquainted with furniture manufacturing, to take one-half interest in a factory now being built at Sheffield, Ala. Address Z. T. Spencer, Sheffield, Ala.

A PARTNER WANTED with \$8,000 to \$10,000 capital to assist in carrying on the business of a first-class machine shop, with good business prospects, located in Atlanta, Ga. Address all inquiries to Box 297, Atlanta, Ga.

A PARTNER with \$10,000 to \$15,000 wanted to operate a cotton mill in Mississippi. Experience not essential. Mill in running order and can be had free of rent for one year, and very low rent after that. I have had 20 years' experience and know that the mill can clear \$100 a day. One firm will contract for all the yarn mill makes for two years at good price. Myron Kent, Natchez, Miss.

WANTED.—A situation by a thoroughly competent manager of the advertising department of a patent medicine or similar business. Long experience and first-class references. Address H. E. T., care Box 98, Atlanta, Ga.

A PRACTICAL Stove Manufacturer desires to organize a stock company in a growing manufacturing and commercial Southern city to manufacture stoves and fine castings. Corporations and capitalists who would take an interest, please address for particulars, Stove Manufacturer, care MANUFACTURERS' RECORD.

\$3,000 TO \$5,000 TO INVEST. Wanted to buy out a business or an interest in business, hardware preferred, in some growing city. Box 766, Baltimore, Md.

A PARTNER, owing to advanced age, will sell cheap his half interest in a steam saw mill in Western North Carolina. Mill has capacity of 15,000 feet per day, and is located on railroad and good logging stream, on which is an inexhaustible supply of good timber. If desired, the entire mill may be purchased. Address Duff Merrick, Asheville, N. C.

WANTED.—A position in some responsible machine manufactory, where steam engines or wood-working tools are built. Have 28 years' experience, and have several important inventions in steam engines and wood-working machinery. For further particulars and reference address H. F., 2014 W. Market street, Louisville, Ky.

BERNHARD DIETZ Manufacturer of Printers' Rollers, and Roller Composition. Factory, cor. Light and Mercer streets, Baltimore. Prices: Composition, (bulk) 30 cents per lb.; for Casting, also, 30 cents per lb. Orders by Mail promptly attended to.

Morrison's Practical Engineer.

A concise treatise on Steam and General Machinery. Also Practical Tests on Electric Lighting. 172 pp. Second edition, revised and improved. Mailed on Receipt of \$1.00.

W. A. MORRISON,

Box 373. LOWELL, MASS.

Mention this paper.

Sweet's Patent Measuring Machine.



Measuring Screw 10, 16 or 20 Threads to the inch, graduated to read thousandths or 32ds without calculation.

IT WILL PAY YOU TO USE THIS MACHINE Upon COMMON WORK for the TIME it will save. Upon FINE WORK for the ACCURACY it will secure. It is the only Micrometer that will not lose its accuracy by use.

We will send one of these machines to reliable parties on trial. Those who use it would not be without one for many times its cost. Address,

SYRACUSE TWIST DRILL CO., Syracuse, N. Y.

Toledo Spring & Variety Iron Works

This is the latest and most improved combined Punch and Shear, being the only one that the operator can stand by his work and handle his lever, being in position to handle both at the same time.

A full line of Conductor Hooks, Ice Tongs and Children's Carriage Springs. Write for prices and circulars. The Woodruff's Patent Celebrated American Suspenders. Have Trough Hanger. The best in the world.

Manufactured by GEO. W. HEARTLEY, Toledo Spring & Variety Iron Works, 303 St. Clair Street, Toledo, Ohio.



ROOTS' NEW IRON BLOWER,



POSITIVE BLAST. IRON REVOLVERS, PERFECTLY BALANCED.

Has fewer parts than any other Blower. Also, Blacksmith Blowers, Portable Forges, Tugue Irons, and Gas Exhaustors.

P. H. & F. M. ROOTS, Manufacturers, CONNERSVILLE, IND.

Send for Priced Catalogue.

No. 7 CANAL STREET.

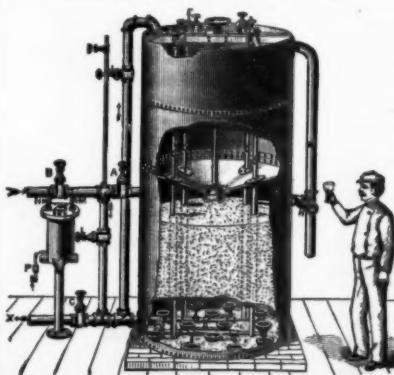
\$250 SINGLE. \$350 DOUBLE.

With Saws and Tools. Top Saw Frame can be added to Single Mill when desired. Capacity, 3,000 to 5,000 per day with 3 men. 10 to 15 horse portable engine will drive it. Agents wanted. Send for description and terms.

ROCKWOLD, NEWCOMB & CO. 160 to 190 S. Pennsylvania St., Indianapolis, Ind.

The HYATT PURE WATER SYSTEM.

Adapting Nature's Process—Endorsed by the Highest Authority.



A Perfect Water Purifying System.

In constant use by Cities, Towns, Water Companies, Factories, Mills, Steam Boilers, Public Institutions, Private Residences.

Indispensable to Textile Manufacturers.

Adapted to every condition requiring Clean, Bright Water in any quantity. Perfect in Operation, Quickly Cleaned Automatically, Reliable, Indestructible.

Muddy Water Made Clean.

HARD WATER MADE SOFT.

Organic and semi-soluble elements removed. Scale and Mud Deposits in Boilers Prevented. With hundreds of plants in operation, treating all kinds of water, our system HAS NEVER FAILED. Promised Results Guaranteed. Adopted by Somerville & Raritan N. J. Water Co.; City Water Co., Belleville, Ill.; Water Works, Charleston, W. Va.; Clark Thread Works, Newark, N. J.; Earl & Wilson, Troy, N. Y.; Norfolk & N. B. Hosiery Co., New Brunswick, N. J.; Victor Knitting Mills, and sixteen other knitting mills, in

Cohoes, N. Y.; Hon. Daniel Manning, Albany, N. Y.; Western Steel Works, St. Louis, Mo., and hundreds of others. Representative Agents Wanted. For Circulars, Prices, &c., Address

THE NEWARK FILTERING CO., Tribune Building, NEW YORK.

TRADE NOTES.

We call attention to the advertisement of Hughes Bros Steam Pump Works, Cleveland, Ohio, whose pumps (for every duty) are becoming very popular in the South. A new handsomely illustrated catalogue, fully describing the various styles and construction, with recent valuable improvements, is now out and will be sent free upon application to any of the readers of the MANUFACTURERS' RECORD. Hughes Bros. are practical men, and make a pump that is not only cheap but a good, well-made piece of machinery.

E. M. MARSH & Co., of Salt Springs, Ga., are putting in the Brush electric light in their hotel, the machinery being furnished by the Ball Engine Co., Erie, Pa.

THE electric light interest opens very active for this year. The Westinghouse Machine Co. has made recent shipments to electric light companies as follows: South Side Electric Light Co., Pittsburgh, Pa., two 150 horse-power; Brush Electric Light Co., Buffalo, two of 60 horse-power, (twenty-first order); the East-End Electric Light Co., Pittsburgh, Pa., two 75 horse-power, (third); Hartford Light & Power Co., Hartford, Conn., two 60 horse-power; Jefferson City Electric Light Co., Jefferson City, Mo., 60 horse-power; Wahoo Electric Light Co., Wahoo, Neb.; Portland Electric Light Co., Portland, Oregon, four of 60 horse-power, (seventh); Litchfield Electric Light Co., Litchfield, Ill., 100 horse-power; Cleveland Electric Light Co., Cleveland, Ohio, 75 horse-power, (seventh); Canon City Electric Light Co., Canon City, Col., 60 horse-power; Olney-Edison Electric Light Co., Olney, Ill., 60 horse-power; Jenney Electric Light Co., Fort Wayne, Ind., three of 15 horse-power.

THE South Pittsburg City Co. have decided to begin their public sale on Tuesday, May 10th, and it will continue for one week. The two hotels, it is claimed, will be open by May 1st (one is now open) and accommodations for 3,000 visitors provided. The railroads will give special excursion rates. The company have now in press an illustrated 24-page pamphlet, which will give the history and present surroundings, resources and attractions of Sequatchee valley and its principal manufacturing town, South Pittsburg. A copy of this will be mailed to any person seeking further information.

MESSES. WHEELER & TAPPAN, of Chicago, Ill., manufacturers of steam pumps of every description, report their business largely on the increase, and that they are unable to turn out work fast enough to comply with the demand. This enterprising firm have a vast number of their pumps in use in Chicago and vicinity, and, owing to the increase of their trade, contemplate removing soon into larger and more commodious quarters.

SCRIBNER'S MAGAZINE for April opens with the first instalment of the long-expected "Unpublished Letters of Thackeray," which more than justify the great interest aroused by their announcement. These letters were written chiefly to Mrs. Brookfield, who is still living in London, and her husband, the late Rev. W. H. Brookfield, who were among Thackeray's most intimate friends, and they are marked by a freedom that is simply charming, while in no case do we feel that anything is made public which should not properly be revealed. The great novelist's overflowing humor is everywhere apparent in the letters, they abound in shrewd and wise observations on men and things, and are especially interesting for their allusions to literary matters, and to Thackeray's own works in particular. Some of the letters are enlivened by original sketches, the reproduction of which adds much to the interest of the publication, and there are many other illustrations, including a full-page portrait of Thackeray from the painting by Samuel Laurence.

Important.

When visiting New York city, save baggage express and carriage hire, and stop at the Grand Union Hotel, opposite Grand Central Depot.

600 handsomely furnished rooms at \$1 and upwards per day. European plan. Elevators and all modern conveniences.

Restaurants supplied with the best. Horse cars, stages and elevated railroads to all depots. You can live better for less money at the Grand Union Hotel than any other first-class hotel in the city.

A GOOD turn is done our readers when we commend the American House, Boston. The judicious management which has rendered it so popular in the past is still continued, and no effort is spared to add to the comfort and convenience of guests.

THE Palace Hotel, Cincinnati, Ohio, is said to enjoy the reputation of being the best \$2 hotel in America. 250 rooms; 140 front rooms. All conveniences and excellent cuisine.

List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date March 22, 1887. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Adams, J. A., Atlanta, Ga. Machine for making excelsior.....	359,657
Allfree, J. B., Cumberland, Md. Flour-packing machine.....	359,951
Barnett, James, Louisville, Ky. Core-stand.....	359,660
Bettis, J. R., Little Rock, Ark. Permutation-lock.....	359,838
Caldwell, D. J., Gunn, Va. Car-coupling.....	359,710
Clark, A. E., Buckholz, Texas. Deep-well pump.....	359,668
Davis, J. M., Prairie Grove, Ark. Planter.....	359,669
Edmondson, W. A., Morven, Ga. Plow.....	359,598
Gorrell, C. L., Belair, Md. Cable-railway grip.....	359,839
Hamilton, T. H., Baltimore, Md. Can-soldering machine.....	359,793
Hanks, F. M., Midway, La. Cotton-harvester.....	359,724
Hanlen T. J., Macon, Ga. Construction of ships, &c.....	359,866
Harry, H. W., Fort Worth, Texas. Metallic shingle.....	359,605
Hobert, H. H., Baltimore, Md. Automatic brake.....	359,675
Hooper, F. X., and W. Hollingsworth, Baltimore, Md. Machine for printing on boards.....	359,972
Jarvis, W. D. F., Philippi, W. Va. Car-ventilating apparatus.....	359,975
Knapp, Chas., Mount Pleasant, Tenn. Invalid-bedstead.....	359,728
Loane, J. W., Jr., Baltimore, Md. Window-awning.....	359,931
Macrae, Roderick, Baltimore, Md. Combined volt and ampere meter.....	359,619
Mann, W. B., Baltimore, Md. Dental-engine hand-piece.....	359,798
Moore, G. W., New Orleans, La. Buckle.....	359,683
Parker, G. C., Buchanan, Tenn. Plaiting-machine.....	359,810
Perkins, Stephen, New Orleans, La. Device for opening throttle-valves.....	359,628
Sawyer, U. P., Camilla, Ga. Seed-conveyer.....	359,635
Seabrook, Wm., Edisto Island, S. C. Buckle.....	359,819
Sewel, Alworth, Berryville, Ark. Fire-alarm.....	359,694
Shelton, J. K. P., Gaston, Ala. Monument or sign-holder.....	359,639
Shurtz, W. D., Baltimore, Md. Temporary elastic horseshoe.....	359,897
Steele, Patterson, Lexington, Ky. Gate.....	359,746
Stone, C. M., Belton, Texas. Wash-board.....	359,644
Sumerwell, E. K., Covington, Ky. Carburetor.....	359,646
Tabony, J. H., New Orleans, La. Toll-collecting apparatus for public telephone-stations.....	359,747
Telfer, J. C., Palatka, Fla. Disk steam-engine.....	359,906
Williamson, P. E., Washington, Ga. Cotton-gin, scale and press.....	359,904
Wilson, B. J., Atlanta, Ga. Brick-machine.....	359,655
Wilson, C. H., Paducah, Ky. Locomotive.....	359,647

A. P. THAYER,
Solicitor of U. S. and Foreign
PATENTS,
No. 86 Astor House, New York.

Experience of Over 20 Years.

WOOD-ENGRAVING
ELECTROTYPING
PRINTED SUPPLIES

Manufacturers,
Wood Engraving,
Electrotyping
and Printing.

Publishers of The Manufacturers' Exchange.
A. MUGFORD, Hartford, Conn.

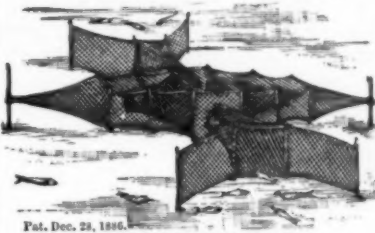
HOW TO KEEP BOILERS CLEAN"
And Prevent
SCALING,
FOAMING,
BURNING.



Hotchkiss Mechanical Boiler Cleaner,

Illustrated in an eighty-eight page book, which will be mailed FREE, to any address, by JAS. I. HOTCHKISS, 98 JOHN ST., N. Y. Beware of imitations.

Patent FISH & TERRAPIN TRAP
FOR RIVER AND CREEK FISHING.



J. S. JOHNSON & CO.
Manufacturers Twines and Netting,
121 South St., BALTIMORE.

Write for Description and Prices.



LEE'S
FILTERING JOINT

Prevents Soot, Leaves, Bugs,
Caterpillars or dead Birds
from entering the Cistern.
It is the Cheapest and
Best Filter ever made.
It will not clog up.
Always set for use.
Prices and Descriptive
Circulars furnished
on application,
THOMAS LEE,
Patentee and Sole Manufacturer,
46 and 48 Race St., Cincinnati, O.

CHAMPION IRON FENCE CO.
KENTON, OHIO.

Largest Iron Fence and Railing Works in U. S.



SPECIALTIES—Iron Stairs and Jail Work.
Builders' and Ornamental Iron Work, and the only
manufacturers of Malleable Iron Cresting, guaranteed
against breakage; also manufacturers of the Celebrated
Ohio Champion Iron Fence and Lift Pumps.
Send for 150-page Catalogue.

WM. E. TANNER,

No. 1415 Main Street, Richmond, Va.

Is prepared to furnish promptly

LIGHT LOCOMOTIVES,

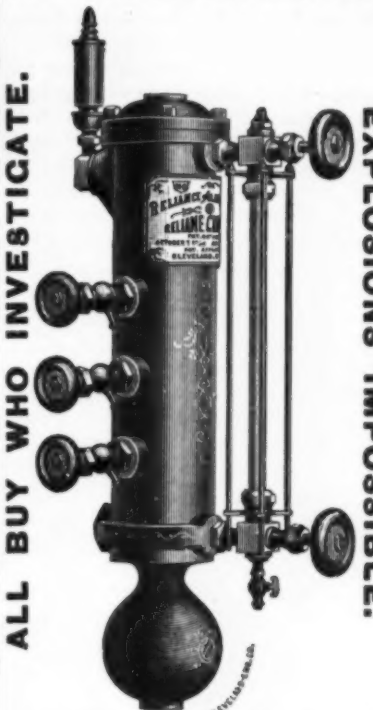
Dummies for Street Railroads,

Pole Railway Locomotives and Cars,

ENGINES, BOILERS, & SAW MILLS.

Also, Freight Cars, of all styles, Railroad
Spikes, Fish Plates, Bolts, Car Axles, Car
Wheels, Trucks, Links, Pins, and other
Car Forgings, Bar Iron, Steel Horse
Shoes.

RELIANCE
ALARM GAUGES



AGENTS WANTED EVERYWHERE.

Illustrated Price-List Free.

RELIANCE GAUGE COMPANY,
Office, Argyle Building, CLEVELAND, OHIO.

ICE MACHINE.

The advertiser, owning a first-class Ice Machine, desires a party to take an interest in same and erect it in any good Southern town. Party taking interest to manage the business, or if stock company is organized, owner will sell and take stock.

Address P. O. Box 240,
KANSAS CITY, MO.

FORT SCOTT, KANSAS.

Attention of Capitalists and Manufacturers is called to the numerous advantages existing at Fort Scott, Kansas, which will soon make this city one of the most important manufacturing and commercial points in the West, and enable it to maintain its present supremacy over all other cities in this State. The natural facilities are unequalled. Coal of the best quality is sold at \$1.50 to 2.00 per ton; slack, 50 cents to \$1 per ton, delivered. Abundance of stone and brick, best quality. Natural gas is fully developed, and used for all purposes. Facilities for transportation and distribution are unequalled, being already the junction of five trunk railways. Direct communication with lumber regions of Mo. and Ark. Correspondence solicited.

SECRETARY BOARD OF TRADE.

For Sale Cheap
ON LONG TIME.

- 1 32 in. x 32 in. x 9 ft. heavy, second-hand planer.
- 1 Davis Keyseator, 3/4 in. to 1 in., Keyseators, Bargain.
- 3 Steam Pumps, second-hand. All sizes.
- 1 Chasing Lathe, 17 in. x 5 ft. Bed. New Haven.
- 1 No. 4 Sturtevant Blower. Good as new.
- 1 Second-hand Corn Grinding Mill.
- 1 10 Horse Power and 1 12 Horse Power Portable Engine and Boiler on wheels, second-hand.
- Vertical Engines, 1 to 20 Horse Power.
- Horizontal " 6 to 90 " "
- Vertical and Horizontal Boilers, either iron or steel—any horse power desired.
- Round and Square Tanks—all sizes.
- Saw Mills and Planing Mill Machinery and Machine Shop Tools.
- Also,
Shafting, Pulleys, Hangers, Belting, Belt Fasteners, Lace Leather, Belt Grease, Journal Grease, Pipe, Tubas, Fittings, Valves, Pipe Tools, Files, Bolts, Set and Cap Screws, Wrought Rim Pulleys, Sheet Gum and Packing, all kinds. Boiler Scale Preventive, Gardner Governors 1/2 in. to 4 in. in stock.
- Headquarters for Gas Engines.
- One Sturtevant Blower, Monogram Pattern.

WM. C. CODD,

2010 and 2012 Aliceanna Street,
BALTIMORE, MD.

Will Erect a Planing Mill.

FORSYTH, GA., March 24, 1887.
Editor Manufacturers' Record:
 Messrs. Bennett Bros., practical mechanics, will erect a planing mill at once. Quite a number of new dwellings will be built this spring. Considerable attention is given to the growing of fruit, and the interest is increasing. Middle Georgia, and particularly Monroe county, is conceded to be the finest fruit section in the South. Forsyth has caught the spirit of the "boom" that is rolling over the New South. S. F. BECKHAM.

Rebuilt Saw Mill.

JERUSALEM, N. C., March 19, 1887.
Editor Manufacturers' Record:
 We have rebuilt our saw mill, and everything is moving off nicely. We will add other machinery soon. S. J. TATUM & CO.

BIRMINGHAM, ALA., March 21, 1887.
Editor Manufacturers' Record:
 Have added complete stereotype outfit. Will shortly put in a 75-light incandescent electric light plant.

CALDWELL PRINTING WORKS.

A Creamery.

BUCKEYSTOWN, MD., March 23, 1887.
Editor Manufacturers' Record:
 I have decided to start a creamery for the manufacture of butter and cheese, and have just commenced to put up the building.

A. W. NICODEMUS.

Erecting Saw and Corn Mills.

FOREST CITY, N. C., March 22, 1887.
Editor Manufacturers' Record:
 I am now putting up a saw mill, corn mill, and cotton gin, presses, &c. All my machinery I will run by steam.

I. N. BIGGERSTAFF.

COLUMBUS, MISS., March 19, 1887.
Editor Manufacturers' Record:
 I am starting process for evaporating ochra at Columbus, Miss., on a larger scale than at Mobile.

S. BRADFORD.

TOLEBOROUGH, KY., March 20, 1887.
Editor Manufacturers' Record:
 The enterprise we expect to start is a planing mill and grist mill. Not being sure of getting the lot we want, we cannot say whether we will go ahead or not, but expect we will.

PUTMAN & GRIGSBY.

Water Works to be Built.

NATCHEZ, MISS., March 22, 1887.
Editor Manufacturers' Record:
 A hotel company has been formed, called the Natchez Hotel Co. They contemplate building a \$70,000 hotel. The contract for water works has been awarded to S. R. Bullock & Co., of New York.

W. H. MALLERY.

ATLANTA, GA., March 24, 1887.
Editor Manufacturers' Record:
 In addition to our hat and gents' furnishing goods, we have this month started a shirt factory.

HUGHES & LAW.

GREENVILLE, VA., March 25, 1887.
Editor Manufacturers' Record:
 It is our intention to enlarge our mining (manganese) operations as soon as practicable.

VINES & STEELE.

Erecting Wood-Working Factory.

SHREVEPORT, LA., March 22, 1887.
Editor Manufacturers' Record:
 We are building a factory for the purpose of manufacturing wooden pumps and wood-ware generally.

SHREVEPORT PUMP & TUBE WORKS.

New Machinery.

KAUFMAN, TEXAS, March 21, 1887.
Editor Manufacturers' Record:
 Our mill at present is worth about \$7,000, and we are adding to it new machinery which will cost us about \$5,000. We are putting in the Smith centrifugal reels and the Todd & Stanly rolls. We think we will have it in running order by the middle of April.

FREEMAN & PEED.

Purchasing Machinery.

KNOXVILLE, TENN., March 24, 1887.
Editor Manufacturers' Record:
 A committee has been appointed by the newly organized steam cracker factory at Knoxville, Tenn., to purchase machinery, &c. J. M. Gant, secretary and treasurer, could give information. H. N. SEXTON, JR.

PORTSMOUTH, VA., March 26, 1887.
Editor Manufacturers' Record:
 Wm. H. Stewart, J. L. Watson, Henry Kien, Adrian Riddick and T. J. Dunham have applied for a charter for a street railroad in this city. If granted, we propose to commence work as soon as sufficient stock is subscribed.

WM. H. STEWART.

IRONTON, O., March 28, 1887.
Editor Manufacturers' Record:
 Arrangements have been completed for the removal of the plant of the Ironton Hoe & Tool Co. to South Pittsburg, Tenn. A company has been organized and incorporated under the name of the Sequachee Hoe & Tool Co., of South Pittsburg, Tenn. Its officers are J. R. Norton, president; J. P. W. Brown, vice-president, and Louis F. Eastman, secretary and treasurer. The product of the factory is to be a complete line of eye and handled planter's hoes, rakes, picks, mattocks and general railway and miner's supplies. The total output of finished tools will average 100 dozen per day. The latest improved machinery for making handled goods will be added to the plant of the Ironton Hoe & Tool Co., and its present capacity much enlarged. The contracts have been let for the factory buildings at South Pittsburg, and it is expected the works will be in operation in 60 days.

J. R. NORTON.

ATLANTA, GA., March 25, 1887.
Editor Manufacturers' Record:
 Chas. J. Harben, Juno, Dawson county, Ga., has purchased a saw mill of Russell & Co.

J. W. DUNN.

To Build a Street Railroad.

NASHVILLE, TENN., March 28, 1887.
Editor Manufacturers' Record:
 I am a stockholder in a street railroad which will be built within the next 60 days. The length of the road will be about two miles, and is to cost from \$12,000 to \$15,000.

B. LANIER.

COLUMBIA, TENN., March 28, 1887.
Editor Manufacturers' Record:
 We have made an addition to our machine shops, 60x30 feet.

CRAIG & WILKINS.

CULPEPER, VA., March 29, 1887.
Editor Manufacturers' Record:
 We are having a railroad located to our quarries, and expect in the next 30 days to be at work on one of the largest and finest deposits of granite in the State.

MT. PONEY GRANITE CO.,
 A. W. HARMAN.

Developing Marble Quarries.

LOUDON, TENN., March 25, 1887.
Editor Manufacturers' Record:
 I have now opened two marble quarries, and intend opening two more during the season; am now working about 25 hands; will soon work a good many more.

A. CHANCE.

Rolling Mill and Furnaces to be Built.

ROME, GA., March 22, 1887.
Editor Manufacturers' Record:
 A rolling mill and one or more furnaces will be erected; to begin in a few weeks, as the arrangements have been perfected to do that work.

J. L. BASS,
 Sec. Rome Land, Iron & Improvement Co.

To Build Water Works.

DE LAND, FLA., March 21, 1887.
Editor Manufacturers' Record:
 We are endeavoring to get in a water supply, and hope to succeed inside the present year.

FRED. S. GOODRICH.

PARKEWOOD, MOORE COUNTY, N. C., }
 March 26, 1887. }

Editor Manufacturers' Record:
 We have bought two 90 horse-power steel boilers, one 80 horse-power automatic engine—heavy saw mill. We will have by June a small fifty-barrel roller flour mill in operation for local trade, and while it is a fair wheat country, we think our roller mill will thresh the wheat crop in 3 years' time. We shall build a small roller mill, outfits up to 2-barrel capacity, and are building our machine shops and foundry, and hope to be running by 15th of May to 1st of June. Our corn mill shops are 36 feet wide by 320 feet long, and have a good trade in these mills, based on the quality of grit—trade mark: "Moore County Grit." For corn-meal it beats the world.

NORTH CAROLINA MILLSTONE CO.

NASHVILLE, TENN., March 28, 1887.
Editor Manufacturers' Record:
 We contract to-day to build 8 miles railroad for pleasure-travel and to develop 800 acres beautiful lands. Will build lake, parks, pleasure-grounds, casino, ball-grounds, and such other places as taste and convenience dictate. Will open for travel by 1st to 15th June.

OVERLAND R. R. CO.

SANTA ANNA, TEXAS, March 24, 1887.
Editor Manufacturers' Record:
 We have already developed an excellent coal mine, and have secured another to develop. It is now for sale, and is simply awaiting the touch of the capitalist.

HARRISON COAL PROSPECTING CO.

Immense Steel Works for Baltimore.

The rumor referred to in our Construction Department last week, of projected large steel works near Baltimore, has taken definite shape, and that which bids fair to be one of the most extensive industrial enterprises in the country has already been inaugurated under most favorable auspices. Mr. J. Wesley Guest, cashier of the Citizens' National Bank, of Baltimore, and Mr. Jacob H. Taylor, a coal operator, have bought the once popular pleasure resort "Holly Grove," a few miles below this city, on the Patapsco, the Sparrow Point farm and other adjacent property, in all making about 1,200 acres, on which they propose, in conjunction with other capitalists of this and adjacent States, to erect extensive steel works. It is stated by Mr. Guest that the plant will be as complete as can be made with all known improved methods and machinery, so as to turn out steel rails, plate, filling all demands of commerce and steel ships of every dimension. When in full operation the works will afford employment to several thousand workmen. Civil engineers are already engaged in surveying the grounds, and the necessary improvements will be expeditiously made. Wharves,

piers, docks, will soon fringe the banks of the Patapsco, and dredges are now at work securing ample depth of water to permit the approach of large vessels. It has not been decided yet whether the capitalists engaged in the enterprise will incorporate under the laws of this State, or simply operate as a private company. Be this as it may, several millions of dollars will be invested. Some of those most largely interested in his great project have money in similar enterprises in Pennsylvania. The advantages of the location, situated on tidewater at this port and in direct communication by rail with all parts of the country, at once stamp it as most admirably situated. The owners of this steel plant will also construct a line of railway to connect with the lines of the Pennsylvania, Baltimore & Ohio and Western Maryland Railroads.

MINING NOTES.

By T. K. BRUNER, Raleigh, N. C.

THE RUDISILL MINE.

This property, consisting of 68 acres, is owned by the Rudisill Gold Mining Co., at Charlotte, N. C., and is under the care of Thos. C. Dunn, Esq., general manager, and Mr. Wm. Jenkins, mine superintendent. The mine contains a vast amount of low grade ore, which has hitherto been neglected in the search for the heavy, rich auriferous sulphurets. These richer ores were concentrated and shipped to various smelting establishments North, and it proved to be profitable means of conducting the work. Recently concentrating machinery has been introduced and the plant enlarged, so that the more abundant low grade material is now being treated, and, it is said, with profit.

The Rudisill is one of the most valuable properties in the South, and is credited with a production of gold exceeding a million of dollars in value. This has resulted from working only about one-tenth of the vein area; the other nine-tenths remain unexploited, but gives every evidence to the miner that it is as good as any part of the ground already worked. These facts warrant a more extended description of the mine.

The property is situated just beyond the limits of the city of Charlotte, and is in the Laurentian formation of the State. They have slate and granite walls, with quartz and biotite granite filling. The vein is a true fissure, and the prevailing form of the ore is quartz and ferruginous sulphide. The vein material is worth from \$5 to \$200 to the ton; the average to the whole mass may be safely estimated at \$10 to the ton. The vein is variable in width, running from five to fifty feet. The deepest shaft is 350 feet, in the bottom of which there is good ore. The probability is, as is generally the case in all true fissures, that good ore will be found far below the present means for mining. There are three other shafts besides the one alluded to above—one is 200 feet deep, another 150 feet, and the third 70 feet deep. There are drifts on the vein from all of these in varying lengths from 50 to 200 feet from the shafts. It is estimated that there are more than 10,000 tons of ore in sight, at an average value of \$10 to the ton.

The buildings consist of a mill-house, shaft-house, three dwellings, offices, &c., which are valued at \$2,500. The machinery consists of a complete plant of pumping, hoisting and reducing machinery, and it is valued at \$13,000. There are 35 hands employed in the present work. The pros-

pects for the future of the property could hardly be better.

STEEL MINE.

It is reported that a large force of hands are employed at this mine, in Montgomery county, and that their forty-stamp mill is going day and night. The output is placed at 1,800 pennyweights per week. This is not official information.

THE APPALACHIAN MINE.

Mr. McCoy, the superintendent of this mine (formerly known as the Coggins), is engaged in building a large and, it is said, expensive mill. The amount to be expended is reported to be \$60,000. It is rather to be deplored, if true, since such a mill is unnecessary in the present state of the development of the mine. Ore can probably be mined fast enough to supply 40 stamps, but that number of stamps should not cost anything like the amount named. The property is a good one, and adequate machinery should be supplied, but no excesses should be indulged in it is intended to be made a profitable investment.

It is further reported that a new and rich "find" has been uncovered. This is quite probable; in fact, from the character of the ground, it will be more remarkable if rich pockets were not met with in the progress of the work.

THE MARKETS.

OFFICE MANUFACTURERS' RECORD, BALTIMORE, March 30, 1887.

The uncertainty as to freight rates after April 4th continues to operate against business, and there is a lull in some lines of trade on this account. With this exception, everything is favorable for continued prosperity throughout the country.

In the manufactured iron market there is comparatively little doing at present, but a larger volume of trade is anticipated for April. We quote as before, viz:

Ref. Bar Iron, 1 to 6x3/4 to 1.....	2.20 @ 2.50 c
" " 1 to 4 1/2 x 1 1/4 to 1.....	" 2.20 @ 2.50 c
" " 3/4 to 2, round and.....	" 2.60 @ 3 c
Hoop Iron, 1 1/4 wide and upward.....	" 2.60 @ 3 c
Band Iron, from 1 1/4 to 6 in. wide.....	" 2.50 @ 2 3/4 c
Horseshoe Iron.....	" 3 @ 3 1/2 c
Norway Nail Rods.....	" 4 1/2 @ 5 1/2 c
Black Diamond Cast Steel.....	" 8 1/2 @ 10 c
Machinery Steel.....	" 3 @ 4 1/2 c
Spring Steel.....	" 3 1/2 @ 4 c
Common Horse Nails.....	" 8 @ 9 c
Railroad Spikes, 5/16 x 2 1/2.....	" 3 1/2 @ 3 c
Steel Boiler Plate.....	" 3 1/2 @ 3 3/4 c
Iron Boiler Plate.....	" 2 1/2 @ 4 c
Boiler Tubes.....	" 4 1/2 @ off list

The pig iron market is unchanged, the demand being quiet, though consumption is going on as freely ever. We quote as before, viz:

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	27 00 @ 29 00
Virginia C. B. Charcoal Wheel Iron.....	27 00 @ 29 00
Anthracite, No. 1.....	21 00 @ 23 00
" " 2.....	19 00 @ 21 00
" " 3.....	17 00 @ 19 00
" " Mottled and White.....	14 00 @ 15 00
Old Rails.....	23 50 @ 24 50
Old Steel Rails.....	22 50 @ 23 00
No. 1 Wrought Scrap.....	23 00 @ 24 00
Old Car Wheels.....	17 50 @ 18 50

HARDWARE.

The trade of the past week has been characterized by no special features, values remaining the same, and the volume of business, as far as can be ascertained, showing no appreciable change. There is an effort being made to fix up the price of Strap and T. Hinges, which have been greatly demoralized recently on account of the withdrawal of one of the leading manufacturers from the association. In reference to the advance in axes noted in our last issue, we are advised that owing to the action of some of the manufacturers it is doubtful if there will be any advance, and it is thought to be more than likely a break in price will occur.

Nails are quoted at \$2.50 @ 2.60, as before.

The Standard Lighting Co., of Cleveland, Ohio, send us the following:

CHICAGO, March 21st, 1887.

At a special meeting of the Executive Committee of the Vapor Stove Manufacturers' Association of the United States, the following preamble and resolution was adopted:

WHEREAS, It has been brought to the knowledge of the Executive Committee of this association that certain manufacturers and jobbers have sold and billed vapor

stoves having the automatic lighting attachment affixed, without charging the additional 50 cents, as prescribed by the rules of the association, therefore

RESOLVED, That all manufacturers and jobbers are hereby notified that strict compliance with this resolution is demanded, under penalty of forfeiture of the license of the manufacturer, or rebate due the jobber, and such other penalties as the contract and obligations to the Consolidated Vapor Stove Company and the Association of Manufacturers may warrant.

(Signed.) JOHN RINGEN,
W. M. LOTTBRIDGE,
J. S. HALTEMAN, } Ex. Com.
F. L. ALCOT,
GARSON MYERS,

Philadelphia Iron Market.

PHILADELPHIA, March 29, 1887.

The small buyers of iron and steel are purchasing very little, being imbued with the idea that a reaction in prices is probable. The large consumers of material, having fair supplies on hand, are quietly awaiting the developments of the next two weeks. Prices are likely to remain steady and firm, because of the heavy consumption going on, and because of the advances which have been made in labor, ore, coal and transportation. In fact, some furnace companies are complaining that their margins, taking all things into account, are no better now than when iron was much cheaper. There is very little new business being done in foreign material, but considerable supplies of foreign stuff came in last week, and large supplies are due here during the next 10 days. The muck bar mills are sold up, but business can be placed now at \$1 per ton less than a month ago. Refined iron is selling at 2.20 at mill, and common at 2 cents, with demand steady, rolls sold up, and a good demand in sight from large and small buyers. The nail makers are finding it a rather difficult matter to preserve strong prices, and it is probable that a more general restriction will be necessary than has as yet been attempted. The plate iron mills are seeking business at 2.30 to 2.40. The structural iron makers are not seeking business, but are booking orders for summer delivery on a 2.30 basis for angles, and 3.30 basis for beams and channels. The steel rail market is very quiet. The contracts now made call for about 1,600,000 tons, and we hear of contracts being placed for foreign rails, which is likely to be followed up by the placing of additional contracts for the Southwest. The entire iron situation is very strong in spite of the present dullness. The production and consumption keep up, and the laying of railroad track is being prosecuted with great vigor. The mileage so far this year of main track is about 625 miles, or nearly 3 times what it was a year ago. If everything goes right, several large engineering requirements will be placed in this market for structural iron, steel rails and plate. The general report throughout the State is that the month of April will be a very active one.

Cincinnati Iron Market Report

Specialty reported by ROGERS, BROWN & Co., Pig Iron Commission.

CINCINNATI, March 28, 1887.

A car-load business, with a sprinkling of 100 and 200-ton orders, has been the record of the week at Cincinnati. Dealers have not pushed sales, and, by general consent, transactions seem to have been dropped until freight rates can again be made. This situation naturally gives the appearance of weakness to the market, and leads some buyers to think that a decline in prices has set in. By the large manufacturers and sellers of iron a little decline in prices would be received with satisfaction, as putting a decisive check upon importations and upon the unwonted activity in new furnace enterprises. It is believed that a satisfactory range of prices can be maintained for a long time with the present vast consumption if foreign iron can be kept out and new sources of supply not too greatly increased. All is still doubt and uncertainty as to freight charges after April 4th, and there will be no attempt to transact business on any scale until buyers and sellers know where they are. We make no change in quotations:

Ohio and Southern Strong Coke No. 1.....	21 50 @ 22 00
" " " " No. 2.....	21 00 @ 21 50
" " " " No. 3.....	20 00 @ 20 50
Ohio Soft Stonecoal, No. 1.....	21 00 @ 22 00
Ohio Soft Stonecoal, No. 2.....	20 00 @ 21 00
Mahoning and Shenango Valley Coke, No. 1.....	23 00 @ 24 00
Hanging Rock Charcoal No. 1.....	24 00 @ 25 00
" " " " No. 2.....	23 00 @ 24 50
Tennessee & Alabama Charcoal No. 1.....	22 00 @ 23 00
" " " " No. 2.....	21 50 @ 22 00

Strong Neutral Coke.....	23 50 @ 24 00
Mottled ".....	18 50 @ 19 00
Cold Shortings.....	18 50 @ 19 00

Southern Car Wheel Iron.....	26 00 @ 28 00
Hanging Rock Cold Blast, No. 1.....	27 00 @ 28 00
Hanging Rock Cold Blast, No. 2.....	24 00 @ 25 00
Lake Superior Malleable.....	27 00 @ 28 00

Specialty reported by E. L. HARPER & Co.

CINCINNATI, March 28, 1887.

While the market apparently has been a little weak for the past two or three weeks, and while some sales of small lots of pig iron have been made at a slightly reduced price, it is no positive indication of a continued decline. Furnaces are not inclined to push sales, as stocks will not warrant it. The purchases made in November, December and January are about used up, therefore, during April and May there will be considerable iron bought, and prices of December and January will, no doubt, be realized. We quote for cash on wharf or cars here:

Hanging Rock Charcoal, No. 1.....	23 50 @ 24 00
" " " " No. 2.....	22 50 @ 23 50
Southern Charcoal, " 1.....	24 50 @ 25 50
" " " " " 2.....	23 50 @ 24 50
Strong Neutral Coke, " 1.....	22 50 @ 23 00
" " " " " 2.....	21 50 @ 22 50
American Scotch, " 1.....	20 00 @ 21 00

Virginia Neutral Coke.....	19 50 @ 20 50
Cold Short.....	19 00 @ 19 50

Hanging Rock, strictly cold blast.....	27 00 @ 28 00
Hanging Rock, strictly warm blast.....	23 00 @ 25 00
"Cranberry," N. Carolina warm blast.....	25 00 @ 26 00
Amherst and Virginia warm blast.....	25 00 @ 26 00
Lake Superior Charcoal, all grades.....	26 00 @ 27 00

Chicago Iron Market.

Specialty reported by ROGERS, BROWN & Co. W. W. BACKMAN, Resident Agent.

CHICAGO, March 28, 1887.

Quite an active trade in carload orders has been going forward during the week. Some of the smaller country buyers have thought it wise to lay in a moderate supply in view of probable changes in freights. No larger business, however, has been possible for the season that the furnaces would sell only on cars at their works, while buyers will only buy for delivered prices. The main elements in the situation remain unchanged. There is a very large consumption at all the foundries and mills, and a large production, but no accumulation at the furnaces. Buyers still look upon the market as in their favor, and do not seem to want to anticipate purchases. We quote for cash f. o. b. Chicago:

Ohio (Hanging Rock) Softeners No. 1.....	23 00 @ 24 00
" " " " " 2.....	24 00 @ 25 00
" " " " " 3.....	23 00 @ 23 50
" " " " " 4.....	22 00 @ 23 00
Southern Coke, No. 1.....	22 50 @ 23 00
" " " " " 2.....	22 00 @ 23 00
" " " " " 3.....	21 50 @ 22 00

Lake Superior.....	23 50 @ 24 50
Southern.....	23 50 @ 24 50
Hanging Rock.....	24 50 @ 25 00

Lake Superior.....	23 50 @ 24 50
Standard Southern.....	25 50 @ 26 00
Hanging Rock, cold blast.....	28 00 @ 30 00
" " " " " warm blast.....	25 50 @ 26 50

Old Rail, American.....	27 00 @ 28 00
Old Wheels.....	22 50 @ 23 50

Louisville Iron Market.

Specialty reported by W. B. BELKNAP & Co., Nails, Wire, Iron, Hardware, Carriage and Wagon Goods.

LOUISVILLE, KY., March 28, 1887.

Bar Iron.—This holds fairly steady, although the range of sizes on which some concessions are offered is being gradually extended, and only such as are required in car and railroad construction seem positively scarce.

Sheet Iron.—The heavier numbers are holding quite firm, and the concessions on light gauges are comparatively unimportant.

Steel.—There is an extraordinarily good demand for the best grades of cast steel. The season being almost over for plow and agricultural steel, there is little doing in the way of new business on that.

Nails are selling freely in this market at below the manufacturers' card; in fact, there is scarcely any time that the full card rate as published by the mills has been asked for them.

Wire.—The demand for wire still continues good, both barbed and plain. The halt in the iron market, though, has not been

without its effect on barbed wire, making sellers somewhat more anxious, but in nowise diminishing the demand for immediate use.

Specialty reported by Gwo, H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., March 28, 1887.

Aside from numerous inquiries for small lots of softeners, the market has been quiet the past week. We anticipate no improvement in the demand until after the effect of the interstate commerce bill has developed itself. Buyers are determined to hold their orders until then. We report a good demand for old car wheels, and, in consequence of their scarcity, we anticipate a free purchase of high grades of wheel irons. We renew quotations:

Southern Coke, No. 1 Foundry.....	21 50 @ 22 00
" " " " " 2.....	20 50 @ 21 00
" " " " " 3.....	20 00 @ 20 50
Hanging Rock Coke, No. 1 Foundry.....	21 00 @ 21 50
Southern Charcoal, No. 1 Foundry.....	21 00 @ 21 50
Silver Gray, different grades.....	20 00 @ 20 50
Southern Coke, No. 1 Mill, Neutral.....	19 50 @ 20 00
" " " " " 2.....	19 50 @ 20 00
" " " " " Cold Short.....	19 50 @ 20 00
Southern Charcoal, No. 1 Mill.....	20 50 @ 21 00
White and Mottled, different grades.....	17 50 @ 18 50
Southern Car Wheel standard brands.....	26 00 @ 27 00
" " " " other brands.....	24 00 @ 25 00
Hanging Rock Cold Blast.....	27 00 @ 28 00
" " " " Warm.....	23 00 @ 24 00

St. Louis Iron Market.

Specialty reported by ROGERS, BROWN & Co., Gay Building, 304 N. 3rd street, St. Louis. W. H. SHIELDS, Manager.

ST. LOUIS, March 28, 1887.

The only business we can chronicle the past week is in the way of small orders which sellers are able to ship before April 4, deliveries beyond that time being practically cut off by freight uncertainties. Some of the roads have worked out their rates under the new law to a point where they can see about what the changes will be. Unofficially it is learned that the changes on pig iron will in most cases amount to only a moderate advance on current rates. Some cases, however, are mentioned in which the rates will be doubled. There is still very much uncertainty and discussion as to how the new law will work out in its operations as affecting the pig iron industry, and the disposition on all hands seems to be to sit down and wait until something more definite can be determined. Furnaces are having more than they can do to keep up with their old orders, and are now pressing their product, but some special lots have naturally shown weakness under the suspension of business. We quote:

Missouri.....	22 00 @ 23 50
Southern.....	22 00 @ 24 00

Southern No. 1.....	— @ —
Southern No. 2.....	21 50 @ 22 00
Ohio Softeners.....	22 00 @ 23 00

Missouri.....	21 00 @ 21 50
Southern No. 1.....	20 50 @ 21 00
Southern No. 2.....	20 00 @ 20 50

Lake Superior.....	25 00 @ 26 00
Lake Superior.....	25 00 @ 26 00

Old Rails.....	27 00 @ 28 00
Old Wheels.....	21 00 @ 22 00
Connellsville Coke, (Frick's).....	— @ 6 60

Chattanooga Iron Market.

Specialty reported by LOWE & TUCKER, Brokers and Commission.

CHATTANOOGA, TENN., March 28, 1887.

Trade for the past week has been unusually brisk in all lines, and will continue to increase in volume as the spring advances. Merchants are having all they can do in every department; especially the hardware trade is extraordinarily active. The construction of new furnaces is being pushed with all the vigor possible, and some three or four new companies have recently been organized for the purpose of erecting new plants. The pig iron business is quiet. Prices, however, have not declined, but are maintaining a very firm position. The result of the interstate commerce bill has done much to demoralize trade, and most quotations are made subject to such changes as may occur in the future, or else at the furnace. Upon the whole the speculative feeling in real estate is not so prominent as it was some three or four weeks ago, and a much more conservative feeling is being manifested.

DIXON'S CRUCIBLES are the standard. The U. S. Government schedules always stipulate "Dixon's or their equal." In ordering your crucibles call for Dixon's and you will not be troubled with broken pots and wasted metals.



BUFFALO HAMMER CO., Buffalo, N. Y., U. S. A., Manufacturers of a full line of
Solid Cast Steel Hammers, Sledges, Mauls,



RAILROAD TRACK TOOLS, &c.

Every Hammer or Tool having our name is fully warranted. Catalogues and discounts sent on application.

BACNALL & LOUD BLOCK CO. BOSTON, MASS.

Largest Manufacturers of Tackle Blocks in the World.

Manufacturers of the Latest Improved Self-Adjusting ROLLER BUSHED and GENUINE METALINE BUSHED and Iron Bushed Rope and Iron Strapped

TACKLE BLOCKS.

CLASP OPEN.



Send for the Celebrated
STAR BRAND.



Send for Catalogue
 No. 5.

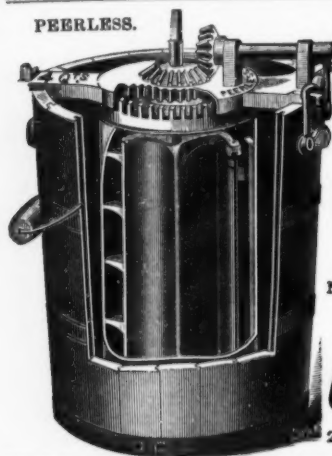


Improved Self-Adjusting Roller Bushed Iron Sheave.

Improved Harcourt Patent Block.

Improved Self-Locking Link Snatch Block.

PEERLESS.



The Gooch "Peerless"

And "Giant" Freezers.

OUR FREEZERS STAND UNRIVALED.

THE BEST GOODS EVER MADE.

Superior in Every Particular.

No other Freezers ever had such a sale. Send for Price-List and Discounts.

PRICES REDUCED FOR 1887!

MANUFACTURED BY THE

GOOCH FREEZER CO.

28, 30, 32, 34, E. Ninth Street,

36 and 38

CINCINNATI, O.

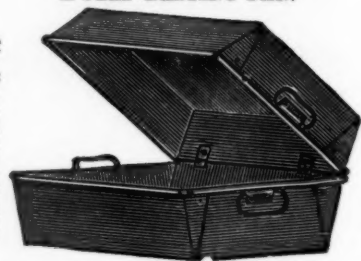
GIANT.



The Improved Roaster and Baker.

A SELF-BANTING PAN.

Patented December 14, 1875.



The best device ever made for Roasting and Baking. Every pan warranted to give perfect satisfaction. Can be used as a double open pan, two single pans, and covered single pan. Low prices and Large Discounts to the Trade and Agents. For particulars address,

WACHS BROS. & CO., Patentees and Manfrs.
 COVINGTON, KY.

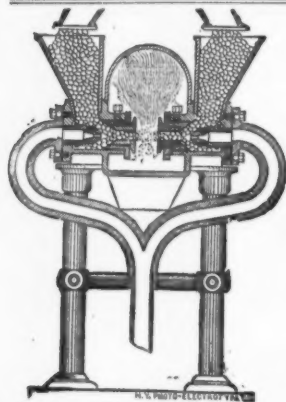
Solid Forged Steel Shears & Scissors.

EVERY BLADE FORGED FROM BAR STEEL AND TEMPERED IN OIL. WE GUARANTEE SATISFACTION.



—Manufactured Solely by—

The CLEVELAND MACHINE CO., CLEVELAND, OHIO.



Sectional View of Pulverizer.

PNEUMATIC PULVERIZER.

The principle of pulverization consists in the employment of

TWO POWERFUL OPPOSING CURRENTS

of dry super-heated steam, so arranged that they continuously charge themselves with crushed or granulated material, and by the great force and velocity of the steam currents the minerals are dashed against each other with such power of concussion as to cause the hardest ores to be pulverized to any degree of fineness desired. The high temperature of the super-heated steam currents employed, through which every minute particle of ore must pass, causes them to become very hot and dry, which produces a beneficial effect upon Sulphurets and ores containing rusty Gold. The light weight and simplicity of construction of the Pulverizer, the extremely small and inexpensive wearing parts are the WONDER and SURPRISE of all who witness its operation. The Company are prepared to furnish complete plants for pulverizing

10 to 200 Tons Per Day,

including a Sectional Steam Boiler supplying all the power required.

PNEUMATIC PULVERIZER COMPANY,

L. F. HOLMAN, Pres.

F. A. LUCKENBACH, Supt.

2 and 4 Stone Street, New York.

WRITE FOR PARTICULARS.

SILVER & DEMING MFG. CO.

SALEM, OHIO.

Manufacturers of

Cistern, Well and Force Pumps,

IRON and BRASS CYLINDERS,

Wind Mill Pump and Supplies,

Hand and Power Rotary Pumps,

BOILER FEED PUMPS,

Hydraulic Rams,

Garden Engines, &c.

WELL DRILLERS'

AND

WELL DRIVERS'

SUPPLIES.

Catalogue of

Pumps for Farm

and Domestic

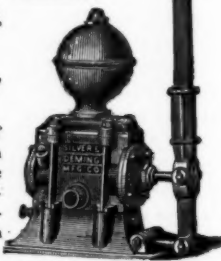
use, Mines, Fac-

tories and Plan-

tations, Sent on

Application.

"Triumph" Horizontal Double Acting Force Pump.



BUY "THE NEW SOUTH."

PRICE \$2.50.

HANDSOMELY BOUND IN CLOTH.

MANUFACTURERS RECORD CO., PUBLISHERS.

→ **HARDWARE.** ←**Baltimore WHOLESALE Prices.**

ANVILS.	
Eagle and Vulcan.....	10 c. dis 20%
Wright's.....	9 1/2 c
Armstrong's Mouse Hole.....	10 c
Trenton.....	10 c
Wilkinson's.....	10 c
AUGERS AND BITS.	
Conn. Valley Mfg. Co.....	extra, 60¢ 10 %
Douglas Mfg. Co.....	No. 1, 60¢ 10 %
Cook's Douglas Mfg. Co.....	dis 55¢ 10 %
Griswold.....	dis 50¢ 10 %
Patent Solid Head.....	dis 25 %
Russell Jennings' Auger, Dowell, Machine.....	dis 10¢ 10 %
Dowell and Hand Rail Bits.....	dis 10¢ 10 %
Ives' "Jennings" Bits.....	dis 10¢ 10 %
Expansive Bits, Clark's small, 1/8; large, 1/4.....	dis 35 %
Expansive Bits, Ives.....	dis 45 %
Expansive Bits Blake's.....	dis 40 and 45 %
Hollow Augers, Ives.....	dis 25 %
Hollow Augers, Douglas.....	dis 25 %
Hol. Aug., Bonney's Adjust., No. 44.....	dis 40 %
Hol. Aug., Ives' Expansive, each 1/4, 1/2, 3/4.....	dis 25 %
Hol. Aug., Universal Expansive, each 1/4, 1/2, 3/4.....	dis 25 %
Wood's.....	dis 25 %
Gimlet Bits.....	dis 50 %
Gimlet Bits, Diamond.....	dis 50 %
Double Cut Gimlet Bits, Shephardson's.....	dis 40 %
Double Cut Gimlet Bits, Douglas.....	dis 40 %
Double Cut Gimlet Bits, Ives.....	dis 50 %
Morse's Bit Stock Drill.....	dis 50 %
L'Hommedieu's Ship Augers.....	dis 15 %
AWL HAFES.	
Sewing Brass Ferrule.....	dis 40¢ 10 %
Patent Sewing, Short.....	dis 40¢ 10 %
Patent Sewing, Long.....	dis 40¢ 10 %
Patent Peg, Plain Top.....	dis 45¢ 10 %
Patent Peg, Leather Top.....	dis 45¢ 10 %
AWLS, BRAD SETS, &c.	
Awls, Sewing, Common.....	dis 35 %
Awls, Shouldered Peg.....	dis 40 %
Awls, Patent Peg.....	dis 35 %
Awls, Shouldered Brad.....	dis 40 %
Awls, Handled Brad.....	dis 40 %
Brad Sets, Aiken's.....	dis 45¢ 10 %
Brad Sets, No. 42, 40, 30; No. 43, 30, 20.....	dis 45¢ 10 %
Brad Sets, Stanley's Exc., No. 1, 2, 3, 4, 5, 6.....	dis 45¢ 10 %
Brad Sets, Stanley's Exc., No. 2, 3, 4, 5, 6.....	dis 45¢ 10 %
Brad Sets, Stanley's Exc., No. 3, 4, 5, 6.....	dis 45¢ 10 %
AXES.	
Collins & Co.....	dis 70¢; beveled, 75¢
Lippincott or Mann's.....	dis 75¢
Single Bit, 1/4 to 3/4 and under.....	dis 75¢ net
Single Bit, 1/2 to 3/4 and over.....	dis 75¢ net
Double Bit, 1/4 to 3/4 and under.....	dis 120¢ net
Double Bit, 1/2 to 3/4 and over.....	dis 120¢ net
Double Bit, beveled.....	dis 120¢ net
Second quality Axes.....	75 cts less than above
AXLES.	
Sheldon & Co., iron.....	55% off
AXLE GREASE—Fraser's.....	dis 50 %
BALANCES.	
Spring Balances.....	dis 50 %
BELLS.	
Hand, Light Brass.....	dis 75¢ 10 %
Hand, White Metal.....	dis 70 %
Hand, Silver Chime.....	dis 25¢ 10 %
Hand, Globe (Cone's Patent).....	dis 25¢ 10 %
Gong, Abbe's.....	dis 25¢ 10 %
Gong, Yankee.....	dis 40 %
Gong, Barton's.....	dis 40 %
Leon Reading.....	dis 40 %
Pull, Brook's.....	dis 40 %
Crank, Taylor's.....	dis 40 %
Lever, Sargent's.....	dis 40 %
Bloomfield.....	dis 40 %
Lever, R. & E. M. Co's.....	dis 45¢ 10 %
Call.....	dis 40 %
Cow, Common Wrought.....	dis 55¢ 10 %
Cow, Western, Sargent's List.....	dis 70¢ 10 %
Cow, Kentucky, Sargent's List.....	dis 70¢ 10 %
Cow, Moore's or Dodge's, Genuine Ky., new list.....	dis 70¢ 10 %
Nos. 0 1 1/4 2 3 4 5 6 Hog.....	dis 70¢ 10 %
dis 120¢ 10 %	dis 120¢ 10 %
Cow, Texas "Star".....	dis 50¢ 10 %
BELLGOWS.	
Blacksmith's Common.....	dis 50¢ 10 %
Molder's.....	dis 50 %
Hand Bellows.....	dis 50 %
BLIND FASTENERS.	
Francis.....	dis 50 %
Mackrell's.....	dis 50 %
Van Sand's Screw Pattern, 1/16 gross, net.....	dis 50 %
Van Sand's Old Pattern.....	dis 55 %
Merriman's.....	dis 55 %
Zimmerman's, 10 1/2 in.....	dis 55 %
Zimmerman's, 9 in.....	dis 55 %
BLIND STAPLES.	
Barbed, 1/4 in. and larger.....	dis 90 % net
Barbed, 1/4 in.....	dis 100 % net
BLOCKS.	
Penfield Blocks.....	dis 60¢ 10 %
Bagnall & Loud.....	dis 60¢ 10 %
BOLTS.	
Cast Iron Barrel Shutter, &c.....	dis 70 %
Cast Iron Chain (Sargent's list).....	dis 65¢ 10 %
Wrought Barrel.....	dis 70 %
Wrought Square.....	dis 70 %
Wrt. Shutter, all Iron, Stanley's list.....	dis 60¢ 10 %
Wrt. Shutter, Brass Knob, Stanley's list.....	dis 60¢ 10 %
Wrought Shutter, Sargent's list.....	dis 60¢ 10 %
Wrought Sunk Flush, Sargent's.....	dis 55¢ 10 %
Wrought Sunk Flush, Stanley's.....	dis 55¢ 10 %
Wrought B. K. Flush, Stanley's.....	dis 50¢ 10 %
Carriage and Tire, Common, new list.....	dis 70¢ 10 %
Carriage and Tire, Philadelphia Pattern.....	dis 75¢ 10 %
Carriage Bolts, Clarke's.....	dis 75¢ 10 %
Norway.....	dis 75¢ 10 %
R. B. & W. Carriage (old list).....	dis 70 %
Tire, American Screw Co's, Phila.....	dis 80 %
Tire, "Bay State".....	dis 80 %
Eagle Philadelphia Tire Bolt.....	dis 80 %
Stove.....	dis 65 %
Machine.....	dis 65 %
Bolt Ends and Lag Screws.....	dis 70¢ 10 %
BORAX.	
90 % net.....	dis 10 %
BRACES.	
Q. S. Backus.....	dis 40 %
Barber's.....	dis 50 %
Spofford's Patent.....	dis 50 %
Ive's Patent Braces.....	dis 50 %
Common Ball (American).....	dis 45 %
Amidon's.....	dis 40 %
BORING MACHINES—WITHOUT AUGERS.	
Sweet & Clark upright, 2.50 angular.....	dis 3.00 net
Lawrence.....	dis 3.00 net
Hubbard.....	dis 3.00 net

Phillips, with Angers.....	7.00	7.50.....net
BRACKETS.		
Shelf, plain.....	dis 50¢ 10 %	
Shelf, fancy.....	dis 55¢ 10 %	
BRIGHT WIRE GOODS.		
New list.....	dis 75¢ 10 %	
BULL RINGS.		
Union Nut Co.....	dis 55 %	
Sargent's.....	dis 60¢ 10 %	
Humason, Beckley & Co's.....	dis 70 %	
BUTTS.		
Wrought Brass.....	dis 80 %	
Cast Brass, Fast Joint.....	dis 35¢ 10 %	
Cast Brass, Loose Joint.....	dis 33¢ 10 %	
Fast Joint, Narrow.....	dis 60¢ 10 %	
Fast Joint, Broad.....	dis 60¢ 10 %	
Loose Joint.....	dis 70¢ 10 %	
Loose Joint, Japanned.....	dis 70¢ 10 %	
Loose Joint, Jap, with Acorns.....	dis 70¢ 10 %	
Parliament Butts.....	dis 70¢ 10 %	
Mayer's Hinges.....	dis 70¢ 10 %	
Loose Pin, no Acorn.....	dis 70¢ 10 %	
Loose Pin, Acorns.....	dis 70¢ 10 %	
Loose Pin, Acorns, Japanned.....	dis 70¢ 10 %	
Loose Pin, Acorns, Jap'd, Plated.....	dis 70 %	
Wrought Iron.		
Fast Joint, Narrow.....	dis 70 %	
Fast Joint, L. Narrow.....	dis 70 %	
Fast Joint, Broad.....	dis 70 %	
Loose Joint, Broad.....	dis 70 %	
Table Butts, Back Flaps, &c.....	dis 70 %	
Inside Blind, Regular.....	dis 70 %	
Inside Blind, Light.....	dis 70 %	
Loose Pin, Wrt.....	dis 70 %	
Spring Hinges.....	dis 70 %	
Geer's Spring and Blank Butts.....	dis 30 %	
Hart Manufacturing Co.....	dis 60¢ 10 %	
American Spring Hinge Co's.....	dis 25 %	
Gem Spring Hinges.....	dis 25 %	
Blind Butts, Shepard's, Nos. 50 and 60.....	dis 70 %	
Blind Butts, Shepard's, No. 50.....	dis 70 %	
Blind Butts, Shepard's, No. 75.....	dis 70 %	
Blind Butts, Lull & Porter.....	dis 80 %	
Blind Butts, Huffer.....	dis 80 %	
Blind Butts, Standard.....	dis 80 %	
Standard Lull & Porter.....	dis 75¢ 10 %	
BOW PINS.		
Humason, Beckley & Co's.....	dis 55¢ 10 %	
Sargent & Co's.....	dis 55¢ 10 %	
Hotchkiss.....	dis 25 %	
BUTCHER'S CLEAVERS.		
Humason & Beckley Mfg. Co.....	dis 30¢ 10 %	
Bradley.....	dis 25 %	
Beatty's.....	dis 40 %	
1 2 3 4 5 6 7		
\$16.50 19.00 21.50 24.00 27.00 30.00 33.50 36.50		
CAN OPENERS.		
American.....	dis 75¢ 10 %	
New Idea.....	dis 75¢ 10 %	
No. 4, French.....	dis 25 %	
No. 5, Iron Handle.....	dis 45 %	
Sardine Scissors.....	dis 55 %	
Sprague, No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.....	dis 50¢ 10 %	
Universal.....	dis 33 %	
CAPS, PERCUSSION.		
U. M. C., F. C. trimmed.....	dis 1.00	
U. M. C., F. L. ground.....	dis 50 %	
U. M. C., Cen. fire ground.....	dis 50 %	
U. M. C., Double W. Proof.....	dis 40 %	
G. D. & S. B.....	dis 33 %	
E. B. 1-10, Kley's.....	dis 50 %	
Musket, in 1-10's.....	dis 50 %	
Hicks Ground Edge in Brass Boxes.....	dis 50 %	
CARTRIDGES.		
Rim.....	dis 60¢ 10 %	
Central Fire, pistol size.....	dis 40¢ 10 %	
" " Military.....	dis 30¢ 10 %	
B. B. Caps, Round Balls.....	dis 1.00	
" Swaged Conical.....	dis 1.75	
NEW LIST ON CARTRIDGES.		
Rim-fire, 22 short.....	dis 5 10 %	
" 32 " 10 " 15.50		
" 38 " 18 " 18.00		
" 41 " 15 " 17.50		
Central Fire—32, 38, 41, 44, 45, 46, 47, 48, 49.....	dis 15.00	
CARDS.		
Horse and Curry.....	dis 10 %	
Cotton, new list, Aug, 1883.....	dis 10 %	
Wool, new list, Aug, 1883.....	dis 10 %	
CARPET STRETCHERS.		
Cast Steel, Polished.....	dis 35.00, dis 30 %	
Cast Iron, Steel Points.....	dis 35.00, dis 30 %	
Bullard's.....	dis 25 %	
CASTERS.		
Bed.....	dis 55 %	
Plate and Shallow Socket.....	dis 55 %	
Deep Socket.....	dis 40 %	
Martin's Patent (Phoenix).....	dis 45 %	
CATLE LEADERS.		
Humason, Beckley & Co's.....	dis 75 %	
Sargent's.....	dis 70 %	
P. S. & W.....	dis 50 %	
CHAIN.		
German Halter and coil Chain.....	dis 60 %	
Trace, Breast and Fancy.....	dis 50¢ 10 %	
Oneida Halter Chain (old list).....	dis 45 %	
Galvanized Pump Chain.....	dis 60 % net	
Jack Chain, Iron.....	dis 75¢ 10 %	
Jack Chain, Brass.....	dis 75 %	
CHALK.		
White.....	dis 55¢ net	
Red.....	dis 75¢ net	
Blue.....	dis 90¢ net	
White Cravens.....	dis 13¢ net	
COTTON LINES.		
Cotton Fish Lines.....	dis 40 %	
Cotton Chalk Lines, 50 feet:		
Nos. 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.....	dis 20 %	
0.00, 6.50, 7.00, 7.50.....	dis 20 %	
CHISELS.		
Socket Framing, Crossmans.....	dis 65¢ 10 %	
Socket Framing, Crossmans.....	dis 65¢ 10 %	
Socket Framing & Firmer.....	dis 75¢ 10 %	
Socket, Douglas.....	dis 75¢ 10 %	
Socket, Ohio Tool Co.....	dis 75¢ 10 %	
Socket, Peck, Stone & Wilcox.....	dis 75¢ 10 %	
Socket, Corner.....	dis 75 %	
Tanged Firmers, Douglas.....	dis 40¢ 10 %	
Tanged Firmers, Butcher's.....	dis 50.00 to 1.00	
L. Merrill's Socket and Framing Chisel.....	dis 65¢ 10 %	
CLAMPS.		
Iron, Screw, Eagle.....	dis 50 %	
Iron, Adjustable, Stearns.....	dis 50¢ 10 %	
Iron, Cabinet, Sargent's.....	dis 65¢ 10 %	
Iron, Carriage maker's, Carr & Crawley.....	dis 25 %	
CLIPS, AXLE.		
Norway or Best.....	dis 60¢ 10 %	
Superior.....	dis 45¢ 10 %	
Conestoga.....	dis 60¢ 10 %	
Coal Hods—Griffiths.....	dis 40 %	
COCKS, BRASS.		
Racking, new list.....	dis 55¢ 10 %	
Globe, new list.....	dis 55¢ 10 %	
Plain Bibbs.....	dis 55¢ 10 %	
Ale and Bear, new list.....	dis 55¢ 10 %	

Spring Caliper
with
Patent Washer.**J. STEVENS ARMS AND TOOL CO.**

P. O. BOX 860.

Chicopee Falls, - MASS.

MANUFACTURERS OF

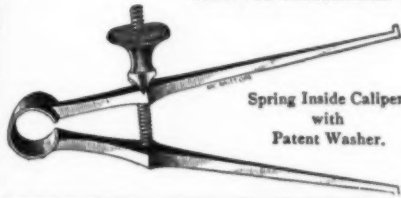
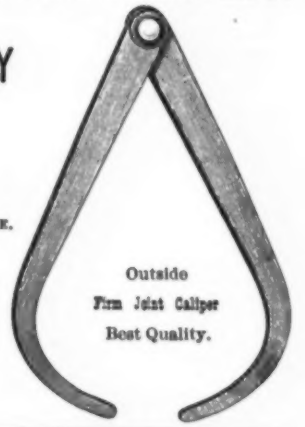
**Spring Calipers
and DIVIDERS.**

Fine Machinists' Tools & Firearms.

Our SHOOTING GALLERY**RIFLE**

Is the Favorite Everywhere.

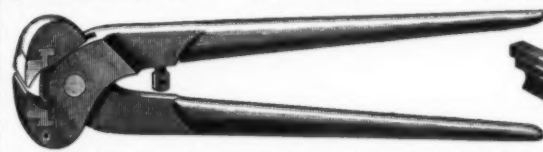
SEND FOR ILLUSTRATED CATALOGUE.

Spring Inside Caliper
with
Patent Washer.Outside
Firm Joint Caliper
Best Quality.**HURLEY'S AUTOMATIC STEAM FLUE CLEANER.**

Only Successful Flue Cleaner in the market. The operation may be described as follows: The proper connection is made with the steam supply and the nozzle inserted in the tube. Then by pressing or releasing the grip lever the steam is admitted or shut off.

Agents Wanted
in every county in
the United States.

Manufactured by

The F. F. ADAMS CO., Erie, Pa.**CAREW'S PATENT WIRE CUTTER.**

These goods have recently been greatly improved. They are now made throughout of

FORGED STEEL.

The advantage of this cutter is seen at a glance. The adjustable jaws are its main feature. These are made of the best tool steel, and are brought to a keen cutting edge before being tempered. The cutting quality is unsurpassed. Whenever they become dulled by use, they can easily be removed, by driving from the end showing price-mark, ground, and as easily replaced. This may be repeated as often as expedient; or they can be replaced by duplicate jaws, thus obviating the necessity of purchasing new cutters. Five sizes 6, 8, 10, 12 and 14 inch. If your merchant does not keep them, address

M. W. ROBINSON. Sole Agent, 79 Chambers St., N. Y.Conductor's
Punch.

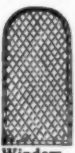
Flower Stand.



Wrought-iron Fence.



Chair.

Revolving
Punch.Window
Guard.

Sand and Gravel Strainer.



Wire Counter Railing.



Machine Rind Case.

FRED. J. MEYERS MFG. CO.

COVINGTON, KY., Manufacturers of

WIRE GOODS OF ALL KINDS,

Wrought-iron Fencing, Cresting and Hardware Specialties.

Send for Illustrated Catalogue and Price List.

To Secure

SOUTHERN TRADE

ADVERTISE IN THE

MANUFACTURERS' RECORD.

Handsomely Bound in Cloth, - \$2.50, including Postage.

HORSE SHOES.		
Burden.....	\$4.10	$\frac{7}{8}$ keg
R. I. Horse Shoe Co., Perkin's Improved, Light, Medium and Heavy.....	\$4.10	$\frac{7}{8}$ keg
Mule Shoes.....	\$5.10	$\frac{7}{8}$ keg
Diamond State Horse Shoes.....	\$4.10	$\frac{7}{8}$ keg
Diamond State Mule Shoes.....	\$5.10	$\frac{7}{8}$ keg
Perkins Horse Shoes.....	\$4.10	$\frac{7}{8}$ keg
" Mule "	\$5.10	$\frac{7}{8}$ keg
Ox Shoes—Mt. Carmel Ox Shoes	10 cts.	per lb.

Lightning".....	dis \$18.00 net 20 %
Midsworth's.....	dis 40 %

ICE CREAM FREEZERS.

Peerless—3 quart, \$4.50; 4 quart, \$5.50; 6 quart, \$7.50; 8 quart, \$9.00; 10 quart, \$10.50; 12 quart, \$12.00; 14 quart, \$13.50; 16 quart, \$15.00; 18 quart, \$16.50; 20 quart, \$18.00; 22 quart, \$19.50; 24 quart, \$21.00; 26 quart, \$22.50; 28 quart, \$24.00; 30 quart, \$25.50. Discount, 10%.

American—2 quart, \$1.75; 3 quart, \$2.25; 4 quart, \$2.75; 5 quart, \$3.25; 6 quart, \$3.75; 7 quart, \$4.25; 8 quart, \$4.75; 9 quart, \$5.25; 10 quart, \$5.75; 11 quart, \$6.25; 12 quart, \$6.75; 13 quart, \$7.25; 14 quart, \$7.75; 15 quart, \$8.25; 16 quart, \$8.75; 17 quart, \$9.25; 18 quart, \$9.75; 19 quart, \$10.25; 20 quart, \$10.75; 21 quart, \$11.25; 22 quart, \$11.75; 23 quart, \$12.25; 24 quart, \$12.75; 25 quart, \$13.25; 26 quart, \$13.75; 27 quart, \$14.25; 28 quart, \$14.75; 29 quart, \$15.25; 30 quart, \$15.75.

Crown, single action, 2 quart, \$3.75; 3 quart, \$4.50; 4 quart, \$5.25; 5 quart, \$6.00; 6 quart, \$6.75; 7 quart, \$7.50; 8 quart, \$8.25; 9 quart, \$9.00; 10 quart, \$9.75; 11 quart, \$10.50; 12 quart, \$11.25; 13 quart, \$12.00; 14 quart, \$12.75; 15 quart, \$13.50; 16 quart, \$14.25; 17 quart, \$15.00; 18 quart, \$15.75; 19 quart, \$16.50; 20 quart, \$17.25; 21 quart, \$18.00; 22 quart, \$18.75; 23 quart, \$19.50; 24 quart, \$20.25; 25 quart, \$21.00; 26 quart, \$21.75; 27 quart, \$22.50; 28 quart, \$23.25; 29 quart, \$24.00; 30 quart, \$24.75.

Crown, double action, with crank, 8 quart, \$10.50; 10 quart, \$12.00; 12 quart, \$13.50; 14 quart, \$15.00; 16 quart, \$16.50; 18 quart, \$18.00; 20 quart, \$19.50; 22 quart, \$21.00; 24 quart, \$22.50; 26 quart, \$24.00; 28 quart, \$25.50; 30 quart, \$27.00.

Crown, double action, with crank, 8 quart, \$10.50; 10 quart, \$12.00; 12 quart, \$13.50; 14 quart, \$15.00; 16 quart, \$16.50; 18 quart, \$18.00; 20 quart, \$19.50; 22 quart, \$21.00; 24 quart, \$22.50; 26 quart, \$24.00; 28 quart, \$25.50; 30 quart, \$27.00.

Crown Ice Chopper.....dis 60 1/2

KNOWS.

Carriage, (Jap'd to c gross).....dis 60 1/2

Base—Common.....dis 10 1/2

Door Mineral.....dis 10 1/2

Door Por. Jap'd.....dis 10 1/2

Door Por. Plated.....dis 10 1/2

Door Por. Plain.....dis 10 1/2

Furniture Plain.....dis 10 1/2

Furniture Wood Screws.....dis 10 1/2

Picture.....dis 10 1/2

Hemlock, Picture.....dis 10 1/2

Shutter, Porcelain.....dis 10 1/2

LANTERNS.

Owl Tubular, 1/2 doz.....dis 50 1/2

LAWN MOWERS.

Acme Buckeye, Easy & Excelsior, new list, dis 40 1/2

LOCKS.

Changes made in list price of some numbers Jan. 1, 1885, dis 25 1/2

Cabinet, Eagle.....dis 40 1/2

Cabinet, Gaylord.....dis 40 1/2

Cabinet, Bridgeport.....dis 40 1/2

Cabinet, P. & F. Corbin.....dis 40 1/2

Trunk, new list, Jan. 1, 1885.....dis 40 1/2

Yale Lock Co., Flat Key.....dis 33 1/2

Plate.....dis 33 1/2

DOOR LOCKS, ETC.

Bradford.....dis 10 1/2

Norwalk.....dis 10 1/2

Norwich.....dis 10 1/2

P. & F. Corbin.....dis 10 1/2

Russell & Erwin.....dis 10 1/2

Mallory, Wheeler & Co.....dis 10 1/2

Nimick & Brittan Mfg. Co.....dis 10 1/2

Padlocks—Russell & Erwin.....dis 10 1/2

Mallory, Wheeler & Co.....dis 10 1/2

Norwich Lock Manf. Co.....dis 10 1/2

Wm. Wilcox & Co.....dis 10 1/2

Nimick & Brittan Mfg. Co.....dis 10 1/2

Wm. Wilcox & Co's Plate Locks.....dis 33 1/2

Yale Lock Manf. Co's "Standard".....dis 40 1/2

Romer's.....dis 25 1/2

Conestoga.....dis 40 1/2

Scandinavian.....dis 40 1/2

Nimick & Brittan's Burglar-Proof Locks.....dis 50 1/2

MALLET.

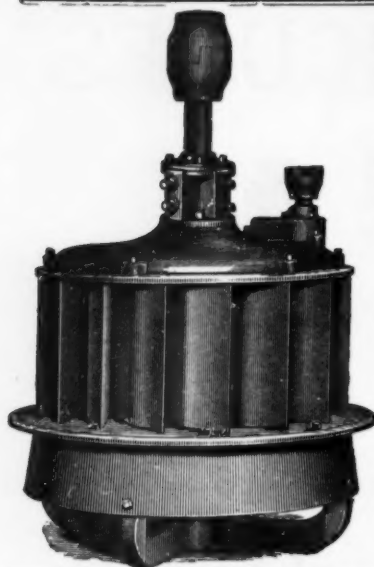
Penfield Block Co., Apple, Hickory and.....dis 30 1/2

Ripley Mfg. Co.....dis 30 1/2

MEAT CUTTERS.

American, \$5.00 \$7.00 \$10.00 \$12.00 \$15.00.....dis 30 1/2

American, B, 50.00; 5, 60.00; 10, 70.00; 15, 80.00; 20, 90.00; 25, 100.00; 30, 110.00; 35, 120.00; 40, 130.00; 45, 140.00; 50, 150.00; 55, 160.00; 60, 170.00; 65, 180.00; 70, 190.00; 75, 200.00; 80, 210.00; 85, 220.00; 90, 230.00; 95, 240.00; 100, 250.00; 105, 260.00; 110, 270.00; 115, 280.00; 120, 290.00; 125, 300.00; 130, 310.00; 135, 320.00; 140, 330.00; 145, 340.00; 150, 350.00; 155, 360.00; 160, 370.00; 165, 380.00; 170, 390.00; 175, 400.00; 180, 410.00; 185, 420.00; 190, 430.00; 195, 440.00; 200, 450.00; 205, 460.00; 210, 470.00; 215, 480.00; 220, 490.00; 225, 500.00; 230, 510.00; 235, 520.00; 240, 530.00; 245, 540.00; 250, 550.00; 255, 560.00; 260, 570.00; 265, 580.00; 270, 590.00; 275, 600.00; 280, 610.00; 285, 620.00; 290, 630.00; 295, 640.00; 300, 650.00; 305, 660.00; 310, 670.00; 315, 680.00; 320, 690.00; 325, 700.00; 330, 710.00; 335, 720.00; 340, 730.00; 345, 740.00; 350, 750.00; 355, 760.00; 360, 770.00; 365, 780.00; 370, 790.00; 375, 800.00; 380, 810.00; 385, 820.00; 390, 830.00; 395, 840.00; 400, 850.00; 405, 860.00; 410, 870.00; 415, 880.00; 420, 890.00; 425, 900.00; 430, 910.00; 435, 920.00; 440, 930.00; 445, 940.00; 450, 950.00; 455, 960.00; 460, 970.00; 465, 980.00; 470, 990.00; 475, 1000.00; 480, 1010.00; 485, 1020.00; 490, 1030.00; 495, 1040.00; 500, 1050.00; 505, 1060.00; 510, 1070.00; 515, 1080.00; 520, 1090.00; 525, 1100.00; 530, 1110.00; 535, 1120.00; 540, 1130.00; 545, 1140.00; 550, 1150.00; 555, 1160.00; 560, 1170.00; 565, 1180.00; 570, 1190.00; 575, 1200.00; 580, 1210.00; 585, 1220.00; 590, 1230.00; 595, 1240.00; 600, 1250.00; 605, 1260.00; 610, 1270.00; 615, 1280.00; 620, 1290.00; 625, 1300.00; 630, 1310.00; 635, 1320.00; 640, 1330.00; 645, 1340.00; 650, 1350.00; 655, 1360.00; 660, 1370.00; 665, 1380.00; 670, 1390.00; 675, 1400.00; 680, 1410.00; 685, 1420.00; 690, 1430.00; 695, 1440.00; 700, 1450.00; 705, 1460.00; 710, 1470.00; 715, 1480.00; 720, 1490.00; 725, 1500.00; 730, 1510.00; 735, 1520.00; 740, 1530.00; 745, 1540.00; 750, 1550.00; 755, 1560.00; 760, 1570.00; 765, 1580.00; 770, 1590.00; 775, 1600.00; 780, 1610.00; 785, 1620.00; 790, 1630.00; 795, 1640.00; 800, 1650.00; 805, 1660.00; 810, 1670.00; 815, 1680.00; 820, 1690.00; 825, 1700.00; 830, 1710.00; 835, 1720.00; 840, 1730.00; 845, 1740.00; 850, 1750.00; 855, 1760.00; 860, 1770.00; 865, 1780.00; 870, 1790.00; 875, 1800.00; 880, 1810.00; 885, 1820.00; 890, 1830.00; 895, 1840.00; 900, 1850.00; 905, 1860.00; 910, 1870.00; 915, 1880.00; 920, 1890.00; 925, 1900.00; 930, 1910.00; 935, 1920.00; 940, 1930.00; 945, 1940.00; 950, 1950.00; 955, 1960.00; 960, 1970.00; 965, 1980.00; 970, 1990.00; 975, 2000.00; 980, 2010.00; 985, 2020.00; 990, 2030.00; 995, 2040.00; 1000, 2050.00; 1005, 2060.00; 1010, 2070.00; 1015, 2080.00; 1020, 2090.00; 1025, 2100.00; 1030, 2110.00; 1035, 2120.00; 1040, 2130.00; 1045, 2140.00; 1050, 2150.00; 1055, 2160.00; 1060, 2170.00; 1065, 2180.00; 1070, 2190.00; 1075, 2200.00; 1080, 2210.00; 1085, 2220.00; 1090, 2230.00; 1095, 2240.00; 1100, 2250.00; 1105, 2260.00; 1110, 2270.00; 1115, 2280.00; 1120, 2290.00; 1125, 2300.00; 1130, 2310.00; 1135, 2320.00; 1140, 2330.00; 1145, 2340.00; 1150, 2350.00; 1155, 2360.00; 1160, 2370.00; 1165, 2380.00; 1170, 2390.00; 1175, 2400.00; 1180, 2410.00; 1185, 2420.00; 1190, 2430.00; 1195, 2440.00; 1200, 2450.00; 1205, 2460.00; 1210, 2470.00; 1215, 2480.00; 1220, 2490.00; 1225, 2500.00; 1230, 2510.00; 1235, 2520.00; 1240, 2530.00; 1245, 2540.00; 1250, 2550.00; 1255, 2560.00; 1260, 2570.00; 1265, 2580.00; 1270, 2590.00; 1275, 2600.00; 1280, 2610.00; 1285, 2620.00; 1290, 2630.00; 1295, 2640.00; 1300, 2650.00; 1305, 2660.00; 1310, 2670.00; 1315, 2680.00; 1320, 2690.00; 1325, 2700.00; 1330, 2710.00; 1335, 2720.00; 1340, 2730.00; 1345, 2740.00; 1350, 2750.00; 1355, 2760.00; 1360, 2770.00; 1365, 2780.00; 1370, 2790.00; 1375, 2800.00; 1380, 2810.00; 1385, 2820.00; 1390, 2830.00; 1395, 2840.00; 1400, 2850.00; 1405, 2860.00; 1410, 2870.00; 1415, 2880.00; 1420, 2890.00; 1425, 2900.00; 1430, 2910.00; 1435, 2920.00; 1440, 2930.00; 1445, 2940.00; 1450, 2950.00; 1455, 2960.00; 1460, 2970.00; 1465, 2980.00; 1470, 2990.00; 1475, 3000.00; 1480, 3010.00; 1485, 3020.00; 1490, 3030.00; 1495, 3040.00; 1500, 3050.00; 1505, 3060.00; 1510, 3070.00; 1515, 3080.00; 1520, 3090.00; 1525, 3100.00; 1530, 3110.00; 1535, 3120.00; 1540, 3130.00; 1545, 3140.00; 1550, 3150.00; 1555, 3160.00; 1560, 3170.00; 1565, 3180.00; 1570, 3190.00; 1575, 3200.00; 1580, 3210.00; 1585, 3220.00; 1590, 3230.00; 1595, 3240.00; 1600, 3250.00; 1605, 3260.00; 1610, 3270.00; 1615, 3280.00; 1620, 3290.00; 1625, 3300.00; 1630, 3310.00; 1635, 3320.00; 1640, 3330.00; 1645, 3340.00; 1650, 3350.00; 1655, 3360.00; 1660, 3370.00; 1665, 3380.00; 1670, 3390.00; 1675, 3400.00; 1680, 3410.00; 1685, 3420.00; 1690, 3430.00; 1695, 3440.00; 1700, 3450.00; 1705, 3460.00; 1710, 3470.00; 1715, 3480.00; 1720, 3490.00; 1725, 3500.00; 1730, 3510.00; 1735, 3520.00; 1740, 3530.00; 1745, 3540.00; 1750, 3550.00; 1755, 3560.00; 1760, 3570.00; 1765, 3580.00; 1770, 3590.00; 1775, 3600.00; 1780, 3610.00; 1785, 3620.00; 1790, 3630.00; 1795, 3640.00; 1800, 3650.00; 1805, 3660.00; 1810, 3670.00; 1815, 3680.00; 1820, 3690.00; 1825, 3700.00; 1830, 3710.00; 1835, 3720.00; 1840, 3730.00; 1845, 3740.00; 1850, 3750.00; 1855, 3760.00; 1860, 3770.00; 1865, 3780.00; 1870, 3790.00; 1875, 3800.00; 1880, 3810.00; 1885, 3820.00; 1890, 3830.00; 1895, 3840.00; 1900, 3850.00; 1905, 3860.00; 1910, 3870.00; 1915, 3880.00; 1920, 3890.00; 1925, 3900.00; 1930, 3910.00; 1935, 3920.00; 1940, 3930.00; 1945, 3940.00; 1950, 3950.00; 1955, 3960.00; 1960, 3970.00; 1965, 3980.00; 1970, 3990.00; 1975, 4000.00; 1980, 4010.00; 1985, 4020.00; 1990, 4030.00; 1995, 4040.00; 2000, 4050.00; 2005, 4060.00; 2010, 4070.00; 2015, 4080.00; 2020, 4090.00; 2025, 4100.00; 2030, 4110.00; 2035, 4120.00; 2040, 4130.00; 2045, 4140.00; 2050, 4150.00; 2055, 4160.00; 2060, 4170.00; 2065, 4180.00; 2070, 4190.00; 2075, 4200.00; 2080, 4210.00; 2085, 4220.00; 2090, 4230.00; 2095, 4240.00; 2100, 4250.00; 2105, 4260.00; 2110, 4270.00; 2115, 4280.00; 2120, 4290.00; 2125, 4300.00; 2130, 4310.00; 2135, 4320.00; 2140, 4330.00; 2145, 4340.00; 2150, 4350.00; 2155, 4360.00; 2160, 4370.00; 2165, 4380.00; 2170, 4390.00; 2175, 4400.00; 2180, 4410.00; 2185, 4420.00; 2190, 4430.00; 2195, 4440.00; 2200, 4450.00; 2205, 4460.00; 2210, 4470.00; 2215, 4480.00; 2220, 4490.00; 2225, 4500.00; 2230, 4510.00; 2235, 4520.00; 2240, 4530.00; 2245, 4540.00; 2250, 4550.00; 2255, 4560.00; 2260, 4570.00; 2265, 4580.00; 2270, 4590.00; 2275, 4600.00; 2280, 4610.00; 2285, 4620.00; 2290, 4630.00; 2295, 4640.00; 2300, 4650.00; 2305, 4660.00; 2310, 4670.00; 2315, 4680.00; 2320, 4690.00; 2325, 4700.00; 2330, 4710.00; 2335, 4720.00; 2340, 4730.00; 2345, 4740.00; 2350, 4750.00; 2355, 4760.00; 2360, 4770.00; 2365, 4780.00; 2370, 4790.00; 2375, 4800.00; 2380, 4810.00; 2385, 4820.00; 2390, 4830.00; 2395, 4840.00; 2400, 4850.00; 2405, 4860.00; 2410, 4870.00; 2415, 4880.00; 2420, 4890.00; 2425, 4900.00; 2430, 4910.00; 2435, 4920.00; 2440, 4930.00; 2445, 4940.00; 2450, 4950.00; 2455, 4960.00; 2460, 4970.00; 2465, 4980.00; 2470, 4990.00; 2475, 5000.00; 2480, 5010.00; 2485, 5020.00; 2490, 5030.00; 2495, 5040.00; 2500, 5050.00; 2505, 5060.00; 2510, 5070.00; 2515, 5080.00; 2520, 5090.00; 2525, 5100.00; 2530, 5110.00; 2535, 5120.00; 2540, 5130.00; 2545, 5140.00; 2550, 5150.00; 2555, 5160.00; 2560, 5170.00; 2565, 5180.00; 2570, 5190.00; 2575, 5200.00; 2580, 5210.00; 2585, 5220.00; 2590, 5230.00; 2595, 5240.00; 2600, 5250.00; 2605, 5260.00; 2610, 5270.00; 2615, 5280.00; 2620, 5290.00; 2625, 5300.00; 2630, 5310.00; 2635, 5320.00; 2640, 5330.00; 2645, 5340.00; 2650, 5350.00; 2655, 5360.00; 2660, 5370.00; 2665, 5380.00; 2670, 5390.00; 2675, 5400.00; 2680, 5410.00; 2685, 5420.00; 2690, 5430.00; 2695, 5440.00; 2700, 5450.00; 2705, 5460.00; 2710, 5470.00; 2715, 5480.00; 2720, 5490.00; 2725, 5500.00; 2730, 5510.00; 2735, 5520.00; 2740, 5530.00; 2745, 5540.00; 2750, 5550.00; 2755, 5560.00; 2760, 5570.00; 2765, 5580.00; 2770, 5590.00; 2775, 5600.00; 2780, 5610.00; 2785, 5620.00; 2790, 5630.00; 2795, 5640.00; 2800, 5650.00; 2805, 5660.00; 2810, 5670.00; 2815, 5680.00; 2820, 5690.00; 2825, 5700.00; 2830, 5710.00; 2835, 5720.00; 2840, 5730.00; 2845, 5740.00; 2850, 5750.00; 2855, 5760.00; 2860, 5770.00; 2865, 5780.00; 2870, 5790.00; 2875, 5800.00; 2880, 5810.00; 2885, 5820.00; 2890, 5830.00; 2895, 5840.00; 2900, 5850.00; 2905, 5860.00; 2910, 5870.00; 2915, 5880.00; 2920, 5890.00; 2925, 5900.00; 2930, 5910.00; 2935, 5920.00; 2940, 5930.00; 2945, 5940.00; 2950, 5950.00; 2955, 5960.00; 2960, 5970.00; 2965, 5980.00; 2970, 5990.00; 2975, 6000.00; 2980, 6010.00; 2985, 6020.00; 2990, 6030.00; 2995, 6040.00; 3000, 6050.00; 3005, 6060.00; 3010, 6070.00; 3015, 6080.00; 3020, 6090.00; 3025, 6100.00; 3030, 6110.00; 3035, 6120.00; 3040, 6130.00; 3045, 6140.00; 3050, 6150.00; 3055, 6160.00; 3060, 6170.00; 3065,



The VICTOR TURBINE

Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume:

Size of Wheel.	Head in Ft.	Horse Power.	Per Ct. Useful Effect
15-inch.	18.06	30.17	.8682
17½-in.	17.96	36.35	.8690
20-inch.	18.21	49.00	.8632
25-inch.	17.90	68.62	.9084
30-inch.	11.65	52.54	.8678

WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material. We also continue to manufacture and sell at very low prices the

ECLIPSE DOUBLE TURBINE.

So long and favorably known. State your requirements, and send for Catalogue to the

STILWELL & BIERCE MFG. COMPANY
DAYTON, OHIO, U. S. A.

SILVER PLATED WARE.

Wm. Rogers Manf. Co.dis 50&10
Holmes, Booth & Hayden.....dis 50&10
Wallace's Steel Silver Plated.....dis 33½&10
Rogers Bros 1847.....dis 50&5
C. Rogers & Bro.dis 50&10

SCREWS.

Standard new list, Feb. 15.

Flat Head Bright.....75
Round Head Bright.....70
Flat Head Brass.....65
Round Head Brass.....65
Flat Head Blue (add 5¢ to net).....75
Continental Flat Head.....80
Brass and Silver Capped.....40
Japanned Flat Head.....40
Coach, Patent Gimlet Point.....dis 66½
Coach, Common or Lag.....dis 70
Bed.....dis 25
Machine, Flat Head, Iron.....dis 55
Machine, Round Head, Iron.....dis 50
Bench, Iron.....dis 55&10
Bench, Wood, Beach.....dis 25
Bench, Wood, Hickory.....dis 25
Hand, Wood.....dis 25&10
Hand Rail, Sargent's.....dis 40&10
Hand Rail, Humason, Beckley & Co.'s.....dis 40&10
Hand Rail, Am. Screw Co., list Jan. 1, '81.....dis 70
Jack (Wilson's).....dis 25

SCREEN FRAMES AND MIXTURES.

Standard Window Screens No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1445, 1446, 1447, 1448, 1449, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1486, 1487, 1488, 1489, 1490, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506, 1507, 1508, 1509, 1510, 1511, 1512, 1513, 1514, 1515, 1516, 1517, 1518, 1519, 1520, 1521, 1522, 1523, 1524, 1525, 1526, 1527, 1528, 1529, 1530, 1531, 1532, 1533, 1534, 1535, 1536, 1537, 1538, 1539, 1540, 1541, 1542, 1543, 1544, 1545, 1546, 1547, 1548, 1549, 1550, 1551, 1552, 1553, 1554, 1555, 1556, 1557, 1558, 1559, 1560, 1561, 1562, 1563, 1564, 1565, 1566, 1567, 1568, 1569, 1570, 1571, 1572, 1573, 1574, 1575, 1576, 1577, 1578, 1579, 1580, 1581, 1582, 1583, 1584, 1585, 1586, 1587, 1588, 1589, 1590, 1591, 1592, 1593, 1594, 1595, 1596, 1597, 1598, 1599, 1600, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1627, 1628, 1629, 1630, 1631, 1632, 1633, 1634, 1635, 1636, 1637, 1638, 1639, 1640, 1641, 1642, 1643, 1644, 1645, 1646, 1647, 1648, 1649, 1650, 1651, 1652, 1653, 1654, 1655, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1663, 1664, 1665, 1666, 1667, 1668, 1669, 1670, 1671, 1672, 1673, 1674, 1675, 1676, 1677, 1678, 1679, 1680, 1681, 1682, 1683, 1684, 1685, 1686, 1687, 1688, 1689, 1690, 1691, 1692, 1693, 1694, 1695, 1696, 1697, 1698, 1699, 1700, 1701, 1702, 1703, 1704, 1705, 1706, 1707, 1708, 1709, 1710, 1711, 1712, 1713, 1714, 1715, 1716, 1717, 1718, 1719, 1720, 1721, 1722, 1723, 1724, 1725, 1726, 1727, 1728, 1729, 1730, 1731, 1732, 1733, 1734, 1735, 1736, 1737, 1738, 1739, 1740, 1741, 1742, 1743, 1744, 1745, 1746, 1747, 1748, 1749, 1750, 1751, 1752, 1753, 1754, 1755, 1756, 1757, 1758, 1759, 1760, 1761, 1762, 1763, 1764, 1765, 1766, 1767, 1768, 1769, 1770, 1771, 1772, 1773, 1774, 1775, 1776, 1777, 1778, 1779, 1780, 1781, 1782, 1783, 1784, 1785, 1786, 1787, 1788, 1789, 1790, 1791, 1792, 1793, 1794, 1795, 1796, 1797, 1798, 1799, 1800, 1801, 1802, 1803, 1804, 1805, 1806, 1807, 1808, 1809, 1810, 1811, 1812, 1813, 1814, 1815, 1816, 1817, 1818, 1819, 1820, 1821, 1822, 1823, 1824, 1825, 1826, 1827, 1828, 1829, 1830, 1831, 1832, 1833, 1834, 1835, 1836, 1837, 1838, 1839, 1840, 1841, 1842, 1843, 1844, 1845, 1846, 1847, 1848, 1849, 1850, 1851, 1852, 1853, 1854, 1855, 1856, 1857, 1858, 1859, 1860, 1861, 1862, 1863, 1864, 1865, 1866, 1867, 1868, 1869, 1870, 1871, 1872, 1873, 1874, 1875, 1876, 1877, 1878, 1879, 1880, 1881, 1882, 1883, 1884, 1885, 1886, 1887, 1888, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996,

NATIONAL WIRE & IRON CO.

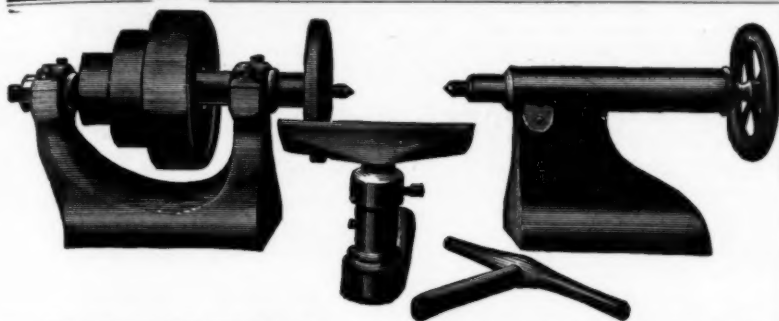
DETROIT, MICH.,

Manufacturers
of
Wire

WIRE CLOTH Galvanized,
Iron and Steel,
Brass & Copper.
Galvanized Poultry Netting.

ALSO A FULL
STOCK OF

WRITE FOR DISCOUNTS.



PROGRESS LATHE HEADS

FOR WOOD OR IRON TURNING.

Emery Grinders, Bolt Cutters,
Pulleys, Hangers and Shafting.

—SPECIAL MACHINERY.—

Progress Engine & Machine Works,
M. C. R. R. SUMMERFIELD, MD.

MONTGOMERY & CO.

Importers of **Stubs' Files, Tools & Steel, Smith's Music Wire, Grobet Files,**

Church's Improved
BENCH



MICROMETER.

CHESTERMAN'S TAPES, VAUTIER TOOLS,

Machinists', Silversmiths', Jewelers', Die Sinkers' and Engravers' SUPPLIES.

GEO. W. MONTGOMERY,
GEO. W. CHURCH.

105 FULTON STREET, NEW YORK.

SAWYER-MAN ELECTRIC CO.

Licensed by and Succeeding to the Commercial Business of the

CONSOLIDATED ELECTRIC LIGHT COMPANY.

OWNERS

OF THE

SAWYER-MAN
PATENTS.



GENERAL OFFICES:

Mutual Life Building,
No. 32 Nassau St., N. Y. City.

BALTIMORE OFFICE:

No. 52 West Fayette St.

PHILADELPHIA OFFICE:

No. 205 Walnut Place.

BOSTON OFFICE:

No. 33 Federal Street.

The DYNAMO of this Company is AUTOMATIC in its regulation, and will maintain a
UNIFORM LIGHT, with ALL or ANY PORTION of the lights in Circuit. Our LAMP will not
BLACKEN and will MAINTAIN its CANDLE POWER during its Guaranteed life.

Plans and Estimates Furnished for all kinds of Incandescent Lighting.

ESTIMATES FURNISHED FOR THE THOMSON-HOUSTON SYSTEM OF ARC LIGHTING.

Shafting, Hangers.

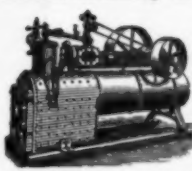
Castings of every
Description made.

Stationary, Distillery
Mill and Boiler Work.

JNO. N. MARQUETTE, 118 W. Falls Ave., {Near
{Pratt
{Street} BALTIMORE, MD.

SHAW & DAVIN, BIRMINGHAM, ALA.

MACHINERY



MACHINERY

COMPLETE GIN AND MILL OUTFITS

—A SPECIALTY.—

Lubricating Oils, Mill and Engineers' Supplies.
Cotton, Grain, Saw-Mill, and Labor-Saving
Machinery. Shafting, Pulleys, Belting, Saws,
Emery-Wheels, Governors, Pumps, Inspirators,
&c. Large stock to select from. Prices low,
goods guaranteed. Write for circulars.

GEM OF THE SOUTH MILL.

The BEST in the WORLD for
grinding Corn, Feed for Stock,
also Meal for Table Use.

GENUINE
FRENCH BUHR STONES.

Can be operated by any one.

Three sizes, from 1 to 8 horse

power. Suitable to any

Power. Satisfaction guar-

anteed. Prices low. Descrip-

tive Circular FREE. Mention this paper. Address

STRAUB MACHINERY CO., Cincinnati, O.

MACHINERY FOR SALE!

Having purchased special machinery for use
in our Pump and Fire Engine Factory, we offer
For Sale New and Second-Hand Lathes, Drills
and other Tools, which we will close out at a
bargain.

Write for Machinery Circular and state what
kind of machinery you want.

RUMSEY & CO. (Limited.)

Pump and Fire Engine Works,
SENECA FALLS, N. Y.

ESTABLISHED 1860.

KREHL, HAUSER & CO.

TANNERS OF

OAK Leather.

ALSO MANUFACTURERS OF

Leather Belting,

Girard, Trumbull Co., Ohio.

SPECIALTIES—Harness, Black and Fair Brid-
les, Line Leather, Saddle and Shoe Skirting, Russett
and Stained Rein Welt, Fly-Net and Collar Leather,
Superior Harness Backs. Write for prices.

—Mention this Paper.

Cap Lathe first.



SHEPARD'S NEW 800

SCREW-CUTTING FOOT LATHE

Foot and Power Lathes,

Drill Presses, Scroll-saw At-

tachments, Chucks, Man-

drels, Twist Drills, Dogs,

Calipers, etc. Lathes on

payment. Send for catalogue of out-

fits for Amateurs or Artisans.

Address, H. L. SHEPARD, Agent, 130 E. Second St., Cinn., O.

Improved Lathe's Pat.

Combined Sawing &
Heading Machine.



FOR THE BEST

MACHINERY

—FOR—

SHINGLES,

HEADING and STAVES,

And Improved

GAGE LATHES

For

Turning Handles, Etc.

ADDRESS:

TREYOR & CO

LOCKPORT,

N. Y.

Buy "THE NEW SOUTH."

—PRICE \$2.50.—

HANDSOMELY BOUND IN CLOTH.

Manufacturers' Record Co., Publishers,
BALTIMORE, MD.

Established 1867.

E. HARRINGTON, SON & CO.

Works and Office,

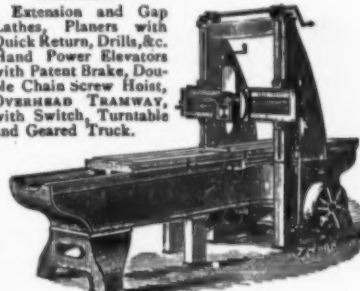
N. 15th St. & Penna. Ave., Phila., Pa., U.S.A.

Manufacturers of a full line of

Iron Working Machinery,

INCLUDING

Extension and Gap
Lathes, Planers with
Quick Return, Drills, &c.
Hand Power Elevators
with Patent Brake, Double
Chain Screw Hoist,
OVERHEAD TRAMWAY,
with Switch, Turntable
and Geared Truck.



Gear Cutting a Specialty. Send for estimates.

Represented by J. O. MAYNARD, 12 Cortland
St., N. Y.; C. E. KIMBALL, 93 Oliver St., Boston;
W. BUCHNER, 108 Main St., Cincinnati.

The Very Best in the Market.

WILL NOT GET OUT OF ORDER.

These injectors now take
the lead over all others.
Are Reliable, Simple, Perfectly Automatic
AND

STEAM



AMERICAN INJECTOR COMPANY

Detroit, Mich., U. S. A.

WIRE RAILING

and Ornamental Wire Works.

DUFUR & CO. 36 N. Howard St., Baltimore.

Wire Railing for Cemeteries, Lawns, Gardens, Offi-
ces and Balconies; Window Guards, Tree Guards,
Wire Cloth, Sieves, Fenders, Cages, Sand and Coal
Screens, Iron Rods, Chains, &c.

J. H. RATTERMANN,

President.

FRED BUSSE,

Sec'y & Treas'r.

The U. S. Varnish Co.

CINCINNATI, - - - OHIO.

258 and 260 Colerain Avenue.

CHICAGO BRANCH, - - No. 47 STATE STREET.

—Mention this name—

THE BRADSTREET

Mercantile Agency

HAS NOW BEEN

Under its present successful management for
the past seven years.

And during that time its business has more than
trebled, while its facilities have propor-

tionately increased.

No expense is considered too great in obtain-
ing and applying to the conduct of the business
all possible improvements. With its present
system for obtaining and promulgating infor-
mation, this Agency is justly rewarded by its
patrons as authority on all matters affecting
commercial credit. Its ramifications are greater
and its business larger than any similar organi-
zation in the world conducted in one interest
and under one management.

You are respectfully invited to investigate,
and if in need of an Agency, to test its ability
to serve you.

CHAS. F. CLARK, President.

Baltimore Office,—American Building,

H. KERSHAW, Supt.

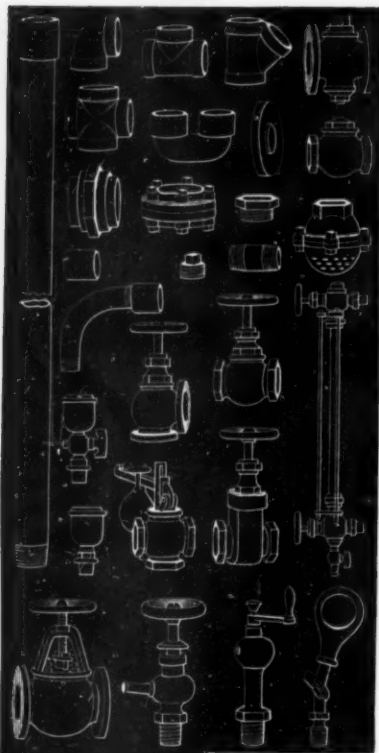
FOR SALE.

One 50-ton Zero Ice Machine at half-price.

Correspondence solicited.

B. P. GERLACH, Box 110, Cleveland, Ohio.

No. 20.

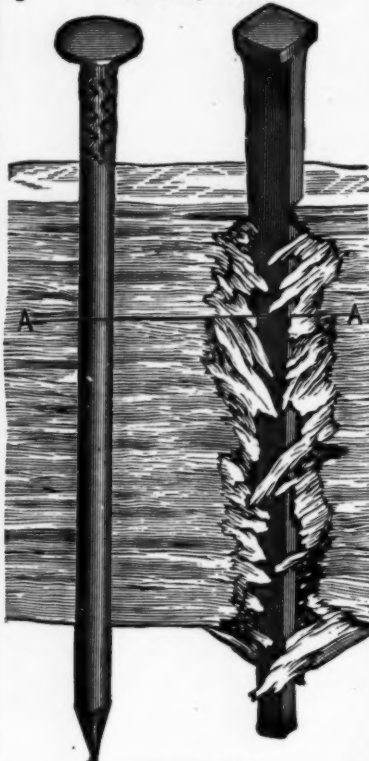
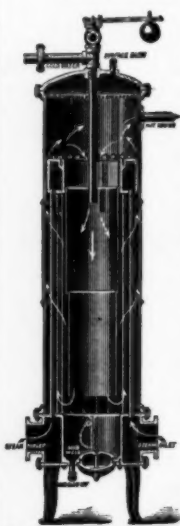


PANCOAST & MAULE,
243 and 245 South Third Street, Philadelphia.
SEND FOR CATALOGUE AND PRICE-LIST.
Correspondence solicited from parties requiring any Goods in the above lines.

Mention this Paper when you Address us.

TAPER-SLEEVE PULLEY WORKS,No. 211 W. 12th Street,
ERIE, PA.Manufacturers of
Taper-Sleeve Wood
Belt Pulleys, Adjustable
Dead Pulleys, Friction-Clutch
Pulleys, FrictionClutch Couplings,
Wood Pulleys in
Halves, Taper-
Sleeve and Com-
pression Couplings
Shafting, Post and
Drop Hangers.
Correspondence
Solicited.
Friction-Clutch Pulley.**CHENEY & HEWLETT,
Architectural Iron Works.**Wrought and Cast Iron Work
for Building Purposes.

N. CHENEY. C. HEWLETT.

OFFICE:
201 BROADWAY, NEW YORK.Book giving strength of wrought-iron girders,
beams and cast-iron columns mailed on application.**For Sale, Cheap.**4,000 ft. 3 in. & 52 ft. 6 in. Gas Pipe.
Has been used only 6 months for conducting water.
Will be sold in any quantity.**Geo. H. Cornelison,**
Orangeburg, S. C.**The Salem Wire Nail Co.**
SALEM, OHIO.MANUFACTURERS OF
Wire and Wire Nails
HEADQUARTERS FOR PENNY WIRE NAILS.**THE GOUBERT PATENT
Feed-Water Heater
AND PURIFIER.**

5 BECKMAN STREET, NEW YORK.

Can be thoroughly
cleaned without taking
it apart.Has a positive de-
vice for the prevention
of Back Pressure.Purifies the water
better than any other
exhaust steam heater.Has a positive circula-
tion, making all parts
of the heating surface
equally effective.**Brass Tubes Free
to Expand.**

Efficient and Durable.

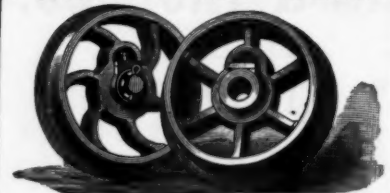
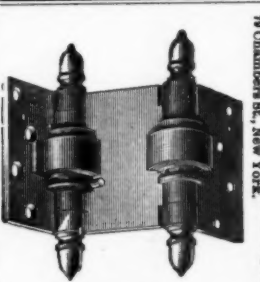
For Circulars and
Specifications, address**The Goubert
Manfg. Company,**

1837. NOVELTY WORKS. 1836.

**JAMES MURRAY & SON,
Machinists and Millwrights**Engines and Boilers, Mills of all kinds, Marine
Railways, &c. Improved Clay Tempering Ma-
chinery, Steam or Horse Power. Phosphate
Machinery, Crushers, Rollers, Mixers, &c., &c.40, 42 & 44 York Street,
NEAR LIGHT, BALTIMORE.

Repairing of all kinds promptly done.

—ESTABLISHED 1865.—

Steam Boilers**JOHN T. COLEMAN & SONS,**
Steam Boiler Works,
Cor. Holliday and Pleasant Sts., Baltimore.Manufacturers of all kinds of Steam and Bath Boilers
Smoke Stacks, Water Tanks, Lard Kettles, &c.
Particular attention given to repairs.**Patent Tram Wheel**THE MOST PERFECTLY
Chilled and Automatic Self-Oiler
IN THE MARKET.Will run two months with one filling of the
reservoir. The economy in oil by using these
Wheels pays for them. For particulars and
prices of Wheels, Axles and Mining Cars,
address,**GEORGE PEACOCK,**
Selma, Ala.**Bates' Hand Elevators.**
Patented April 18, 1871. Reissued July 28, 1876.
OVER 6,000 IN USE.Adapted for Warehouses, Stores, Factories,
Hotels, Public Institutions, and every place
where merchandise, &c., is transferred from one
story to another.**JAMES BATES, Patentee,**
Nos. 1 3 & 5 President Street, BALTIMORE.**UNION SPRING HINGES**
are simple, easily set,
and cannot be put on wrong. They work
smoothly and last long. For wire hinges and
light doors they have no equal. Send for
Circular. H. W. HOBBS, New York agent,
10 Chambers St., New York.**\$250 WILL BUY****THE BEST
SAW MILL**
Yet offered for the money.SEND FOR CIRCULAR.
RICHMOND MACHINE WORKS,
RICHMOND, INDIANA.**ARCTIC ICE MACHINE MFG. CO.**

Works, 4, 6, 8 & 10 West Street, Cleveland, O.

Manufacturers of Machines for Making Ice
and for Refrigerating Breweries, Pork Houses
and buildings of all kinds requiring a steady,
low temperature. Over 100 of our machines
now in use. Send for any particulars desired.
P. O. Box 82, Cleveland, Ohio, or P. O. Box 348
Cincinnati, Ohio.**HUGH SISSON & SONS,**210 E. Baltimore St., bet. North & Calvert Sts.,
BALTIMORE.

MANUFACTURERS OF

Marble MonumentsTombs, Altars, Counters,
Furniture Slabs, Mantels, Tiles.

Estimates and Drawings Free.

WEBBER'S
Centrifugal Pumping Portable Machinery.Giving greater efficiency than any other Centrifugal
Pump on the market. Send for catalogue.**LAWRENCE MACHINE CO.**
Mason Building, - - - BOSTON, MASS.
New York Office, 17 CORTLANDT ST.
AGENTS—J. Post, Jr. & Co., Boston, Mass.; Fair-
banks & Co., St. Louis, Mo.; H. P. Gregory & Co.,
San Francisco, Cal.; R. H. Buchanan, Montreal, P.Q.**Roller Chain Belting**

Detachable in every Link

FOR IMPROVED

ELEVATORS,

Conveyers,

AND

DRIVING BELTS.

FOR HANDLING

Coal, Ores, Grain,

CLAY, BRICK, &c.

ADDRESS THE

Roller Chain Belting Co.

COLUMBUS, OHIO.

Also Manufacturers of the

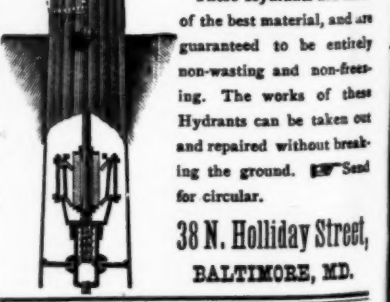
Legg Coal Mining Machines

and Rotary Power Coal Drill.

Send for Illustrated Catalogue.

**Ligowsky-Mueller Trap No. 7**
with "TEIPEL ARM" for
TONGUELESS**Ligowsky**
"Clay"
Pigeons,
No. 2.**LIGOWSKY**
C. P. CO.
Cin'ti, O.SEND FOR CIRCULAR OF
**THE GREATEST
ROCK BREAKER
ON
CAPACITY EARTH
ONE TON
GATES' IRON WORKS
50-58 CLINTON ST. CHICAGO****W. J. CLARK & BRO.**

Manufacturers of

Hydrants.These Hydrants are made
of the best material, and are
guaranteed to be entirely
non-wasting and non-free-
zing. The works of these
Hydrants can be taken out
and repaired without break-
ing the ground. Send
for circular.38 N. Holliday Street,
BALTIMORE, MD.**OSGOOD'S**
\$50
SCALES
For \$35.00
We deliver on trial.
Fully warranted.
all metal parts for
U. S. Standard
8-Ton Wagon Scales.
\$15 covers cost of
timbers and work.
Larger sizes in pro-
portion.
Illustrated book FREE
OSGOOD & CO.
BINGHAMTON, N. Y.

MECKLENBURG IRON WORKS, Charlotte, N. C.

BUILDERS OF { *ENGINES and BOILERS, STAMP MILLS,*
CRUSHERS, Circular Saw and Grist Mills, CORNISH PUMPS,

MINING MACHINERY.

Cotton Presses, Water Wheels, Shafting and General Machinery.

JOHN WILKES, Manager.

WINCHESTER Repeating Arms COMPANY.

A Large Variety
of Calibers.

.22 RIM FIRE.

.44 " "



— THE —
BEST REPEATING & SINGLE SHOT RIFLES
IN THE WORLD.

.32, .38 and .44
Center Fire.

MODEL 1886.

45-70, 45-90 & 40-82

METALLIC AMMUNITION OF EVERY DESCRIPTION.

PAPER SHOT SHELLS, Brass Shot Shells, Gun Wads, Primers and RELOADING TOOLS.

Send for 76-page Illustrated
Catalogue, just out.

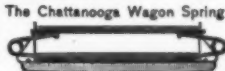
NEW HAVEN, CONN.

Vehicle Spring Co., MANUFACTURERS PAT. WAGON SPRINGS & WAGON SEAT SPRINGS, CHATTANOOGA, TENN.

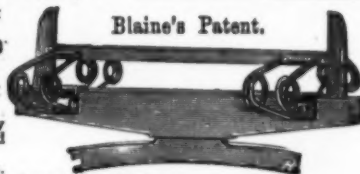


Wagon
Seat
Spring.

The same Wagon can be used as an Express and Lumber Wagon. You can raise the end of your Wagon bed and put the Springs on or off at pleasure.
The hooks that fit the side of the Wagon bed are a part of the Spring, making the lightest, the most comfortable, and the strongest Spring on the market. These are a great improvement on the old style seat Spring.
VEHICLE SPRING CO., CHATTANOOGA, TENN., December 16, 1885.
Gentlemen: After having tried your Springs, both Bolster and Seat, we cordially endorse them as being in all respects the BEST and CHEAPEST now on the market, and heartily commend them for general use. Very respectfully, &c.,
VANCE & KIRBY, J. H. WARNER & Co., Wholesale Hardware and Wagons.
DEMENT, BAIRD & Co., C. AULTMAN & Co., CHAS. W. BIRSE, Farm Implements and Wagons.
Address for further information
ATTENTION, DEALERS! A liberal discount to the trade.



Blaine's Patent.



Mention MANUFACTURERS' RECORD.

VEHICLE SPRING CO., Chattanooga, Tenn.

R. R. ROUSE PATENT ELECTRO-PLATED WELL POINT.



1 1/2	1 3/4	2
\$1.50	\$2.50	\$6.00
2 1/2	3	4
\$9.00	\$12.00	\$35.00
		\$75.00

My 1 1/2 Point is 24 1/2 in. long and has 24 1/2 by 1/2 openings.

A showing the openings before the wire gauze is soldered on. B after wire gauze is soldered on. C showing wire gauze and perforated brass soldered on. These 1 1/2 Points (caliber) are Electro-Plated, with Pure Block Tin inside and outside before receiving the coverings, there being no raw iron to corrode or rust or cause an unpleasant taste in the water. The Electric Process by which it is done is patented and exclusively owned and controlled by me for Driven Well Points in the United States. Warranted not to strip loose where soldered. Write for discounts and circular.

R. R. ROUSE, INDIANAPOLIS, IND.

McShane & Bell Foundry

Fine Iron and Brass Castings Made to Order.



Manufacture those celebrated Bells for Tower Clocks, Court-Houses, Cotton Mills, Factories, &c. Prices and catalogues sent free. Address H. McSHANE & CO. Baltimore, Md.

Mention this Paper.

A Phosphate Mill that has Come to Stay.

WARING'S

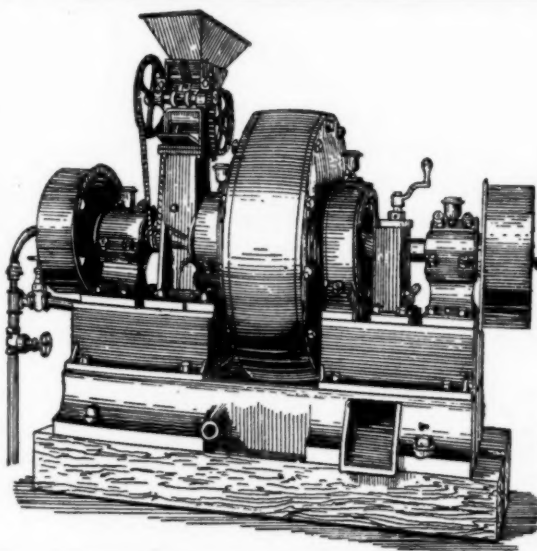
Centrifugal Pulverator

Manufactured by the DE LAMATER IRON WORKS.

Fully Protected by United States and Foreign Patents. Infringers will be Prosecuted.

A FEW OF THE ADVANTAGES OF THIS MILL:

The fineness of product is easily regulated without the use of screens or bolting cloths. No material is lost by escaping into the mill room. No re-pulverizing required. The Pulverator weighs 4,200 pounds and requires only ten horse power. Will give a product of 3,000 pounds an hour, pulverized to 80 or 100 mesh. The wear comes upon parts easily replaceable and inexpensive. For particulars address,



J. B. WARING & SONS, 106 and 108 Liberty St., NEW YORK.

THE MANUFACTURERS' RECORD

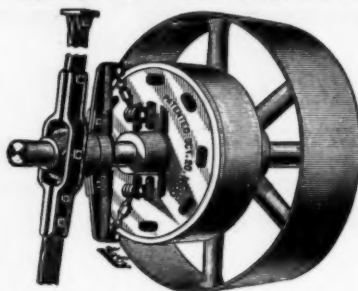
is the most thorough, complete and authentic source of information on Southern industrial affairs in existence. The subscription price is only \$3.00 a year. Some of our subscribers think every issue is worth that much. Try it for a year. Send in your subscription to-day. Don't wait until to-morrow; you may forget it.

Kaestner Patent Friction Clutches

A Perfect Friction Clutch,
SIMPLE and DURABLE.

Has largest friction surface and most perfect toggle and levers. Can be attached to Pulleys, Gears, Sprocket Wheels, or used for Shaft Couplings. 30 sizes, from 5 to 1,000 horse power. Will run at any speed, and is specially designed for running Electric Dynamos.

CHAS. KAESTNER & CO.



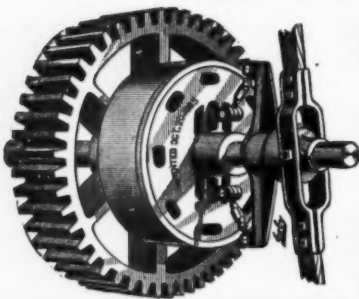
—Sole Builders,—

MACHINISTS and FOUNDERS

And Builders of
General and Special Machinery,

**303 to 311 S. Canal St.
CHICAGO, ILL.**

In ordering Clutches, state size and speed of shaft, and power wanted. We desire specially to place them on trial where all other Clutches have failed to please. We build them singly and in pairs, and furnish the Clutches, or Pulleys and Gears with Clutches attached. Write for catalogue and prices. Mention this paper.



Brick Makers' Supplies.

PERFECTION BRICK PRESS,

An easy-working, quick-operating and powerful press. Will successfully press brick made on any Brick or Tile Machine.

The Wrought-Iron Tempering Wheel,
The most thorough mud temperer known. Tempers faster, mixes better and runs lighter than any wheel made.

Barrows, Trucks, Molds, Kiln Doors, &c.

Write us for pri es.

C. W. RAYMOND & CO.
DAYTON, O.

Mention Manufacturers' Record.



The Spiral Pug Mill —AND— QUAKER BRICK MACHINE.

Capacity 40,000 Perfect Brick Per Day
Great Saving in Labor and Expense!

We contract to furnish complete Brick-yard outfits,—Engines and everything needed complete. Write for our handsomely illustrated catalogue, containing valuable information. Estimates furnished. Correspondence solicited. Address

FLETCHER & THOMAS, Indianapolis, Ind.

Mention MANUFACTURERS' RECORD.



**THE
PREMIER FLOUR
OF AMERICA.
Patapsco Flouring Mills.**

—ESTABLISHED 1774.—

The value of Flour depends upon the essential elements of nutrition contained in the bread it makes. Maryland and Virginia Wheat, from which our PATENT ROLLER FLOURS are chiefly manufactured, has long been conceded to be of most superior quality, because it has a better combination of gluten and phosphates than any other. This fact is recognized, not only in this country, but in the United Kingdom as well, where the "PATAPSCO SUPERLATIVE" commands decidedly more money than any other American Flour, thereby clearly demonstrating its superior qualities for making the whitest, sweetest and most nutritious bread.

ASK YOUR GROCER FOR IT, ALSO FOR

PATAPSCO FAMILY,
CAPE HENRY FAMILY,
PATAPSCO EXTRA,

NORTH POINT FAMILY,
CHESAPEAKE EXTRA,
BEDFORD FAMILY,

ORANGE GROVE EXTRA,
MAPLETON FAMILY,
PIMLICO (GRAHAM.)

C. A. GAMBRILL MFG'G CO.
Office, 32 Commerce St., Baltimore, Md.

THE MANUFACTURES' RECORD

IS THE FOREMOST EXPONENT OF THE INDUSTRIAL INTERESTS OF THE SOUTH.

WALKER MANFG. CO.

Shafting,
Hangers,
Pulleys.

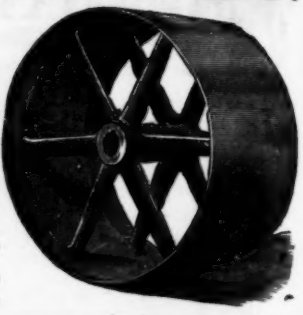
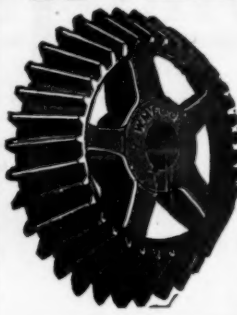
Pulley Castings and
Machine-Molded

GEARING

A SPECIALTY.

Cleveland, - Ohio.

Estimates furnished. Write
for Gear and Price-Lists A.



CLEVELAND TWIST DRILL CO. { Send for Catalogue } 24 & 26 West-st., Cleveland, O.
and prices. } 101 Chambers-st., New York.

The STEWART HEATER CO., Buffalo, N. Y.

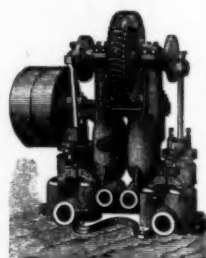
No. 19 & 21 CLINTON ST.

**Do you Want
to Economize?**

The Stewart Heater is the only Feed Water Heater made, which prevents scale in boilers and saves 25 per cent. of fuel bill. Send for descriptive catalogue and price-list of

Heaters, Boiler Feed Pumps,
Flue Cleaners, etc.

It will pay you to correspond with us before purchasing.

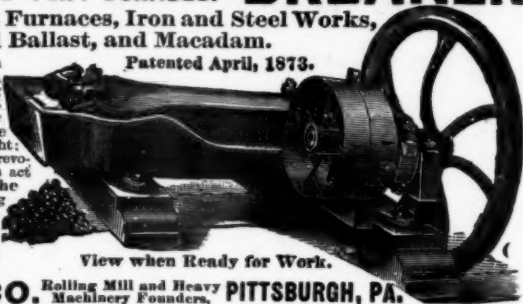


FORSTER'S STONE AND IRON ORE VERY SIMPLE AND VERY DURABLE. BREAKER

For Mining, Blast Furnaces, Iron and Steel Works,
Railroad Ballast, and Macadam.

Patented April, 1873.

Lever moves horizontally. Can be operated with horse, mule, water or steam power. Owing to Great Gain in Lever-ange, we do the work of other Crushers with one third the power and one half the weight; and as we crush twice in a revolution, where other Crushers act but once, we do double the quantity. In Fine Crushing for Stamps, Burrs, or Finishing Mills, we can do more and Finer Work than has ever been attempted. For prices and testimonials, address



TOTTEN & CO. Rolling Mill and Heavy Machinery Founders, PITTSBURGH, PA.



Issues Policies of Insurance after Careful Inspection of the Boilers, covering Loss or damage to property, and Loss of Life and Personal Injury

—ARISING FROM STEAM BOILER EXPLOSIONS.—

Full information concerning the plan of the Company's operations can be obtained at the COMPANY'S OFFICE, Hartford, Conn., or at any agency.

V. ALLEN, Pres't. W. B. FRANKLIN, Vice-Prest. J. B. PIERCE, Sec'y.

—BOARD OF DIRECTORS:—

V. M. ALLEN, President. J. C. HENDEE, President Etna Fire Insurance Co. W. CHENEY, Asst. Treas. Cheney Bros. Silk Mfg. Co. H. M. BEACH, of Beach & Co. J. H. PHILLIPS, of Adams Express Co. W. H. JARVIS, Pres't Colt's Fire Arms Mfg. Co. THOMAS O. ENDERS, Secretary Etna Life Insurance Co. EVERETT BRAINARD, of Case, Lockwood & Brainard. HON. H. C. ROBINSON, Attorney-at-Law, Hartford. GEN. WM. B. FRANKLIN, Vice-President Colt's Patent Fire Arms Manufacturing Co. NEWTON CASE, of Case, Lockwood & Brainard, Hartford. NELSON HOLLISTER, of State Bank, Hartford. CHAR. T. PARRY, of Baldwin Locomotive Works, Philadelphia. EDMUND A. STEDMAN, Treasurer Fidelity Co., Hartford, Conn. CLAPP SPOONER, N. E. Manager Adams Express Co., Bridgeport, Conn.

LAWFORD & McKIM, Agents for Maryland, 22 Second St., Baltimore, Md.

S. W. RITTER, Millwright,

—BUILDER OF—

Flour and Saw Mills, Drug and Chemical Works, Portable Mills, Smut Machines, Mill Stones, Bolting Cloths, Brushes, Guano Fertilizer Mills, and General Mill Supplies,
261 S. Caroline Street, BALTIMORE, MD

WORKSHOPS

WITHOUT STEAM POWER

SHOULD HAVE

BARNES'

Patent Foot Power Machinery. Complete

Outfits for actual workshop business. With them Builders, Cabinet Makers, Metal and Wood Workers compete with steam power. Machines on trial if desired.

Proof of value, prices, full detail, illustr'd catalogue, free. W. F. & John Barnes Co. Rockford, Ill.

Address No 221 Ruby St.



Barnes' Pat. Upright Drills

30-inch Swing, with both Worm and Lever Feed.



Barnes' Pat. Engine Lathe

15 inch swing, 6-foot or 8-foot Bed. These machines are made a specialty in our factory, they have advantages not found in other machines in this line. It will pay parties desiring to purchase, or know more about this class of machines, to send for full description and prices.

W. F. & JOHN BARNES CO. 221 Ruby St., Rockford, Ill.

STEARNS MFG. CO., ERIE, PA.

Capacity 15,000 to 450,000 feet per day. CIRCULAR SAW MILLS. Complete outfits planned and furnished.

ENGINES, 15 to 800 Horse-Power. BOILERS OF IRON OR STEEL.

BAND SAW MILLS, with Friction or Steam Feed.

STEARNS' Fractional Head Blocks, Edgers, Cut-Off Saws, Trimmers.

The Wilkin Pony Gang. No foundation. Capacity 30,000 to 40,000 feet of Flooring per day. The Wilkin Heavy Gang Saw Mill for large mills. Lath and Picket Mills, Bolters, Conveyers, &c.

ESTABLISHED 1845. The Oldest Saw Manufactory in the South.



TOLAND & SON, Front & Low Streets, Baltimore.

Particular attention paid to Large Circular Work. We warrant our Circular Saws to stand more strain, without buckling or cracking, than any other make. We make all kinds of Tough-Tempered Circular, Mill, Cross-Cut, Band and Drag Saws, Planer Knives, Ensilage, Feed, Tobacco, Meat Choppers, and other Knives made to pattern, and Moulding Bits warranted equal to the Best. N. B.—We make no charge for hammering any Large Circular Saw that we can't make "go." GIVE US A TRIAL, and for toughness of temper, durability and quality of material, compare our work with the best you have ever used.

D. SAUNDERS' SONS,

MANUFACTURERS OF THE ORIGINAL

TRADE **I.X.L.** MARK.

Pipe Cutting and Threading Machine.

BEWARE OF IMITATIONS. None genuine without our Trade Mark and name. Also

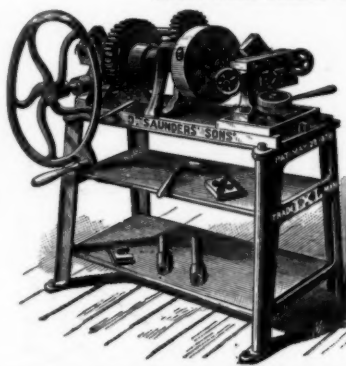
Patent Wheel Pipe Cutter

STEAM AND GAS FITTERS' HAND TOOLS.

Pipe Cutting and Threading Machine

For Pipe Mill Use a Specialty. Send for Catalogue B.

YONKERS, N. Y.



SHULTZ BELTING

IT BELTS THE EARTH AND MAKES THE MOON SPIN LIKE A TOP.

MANUFACTURERS OF

Our BELTING is tanned on the surfaces only; the INTERIOR is RAW HIDE.

Send for Our Valuable Book for Engineers and Belt Users. Free. Agents in all Cities. Send for Trial Belt.

Address SHULTZ BELTING CO., St. Louis, Mo.

SINKER, DAVIS & CO.

MANUFACTURERS.

INDIANAPOLIS, IND.

Automatic Engines.

IRON AND STEEL

BOILERS.

BAND SAW LOG MILLS.

Write for our catalogues and prices.

Sinker, Davis & Co.

MANUFACTURERS.

INDIANAPOLIS, IND.

Automatic Engines.

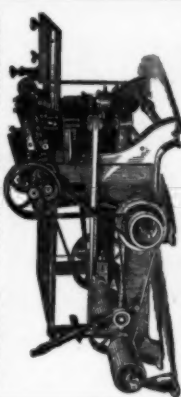
IRON AND STEEL

BOILERS.

BAND SAW LOG MILLS.

Write for our catalogues and prices.

Economist Planer and Matcher.



Price \$325.00 to \$360.00

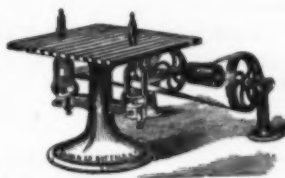
FRANK & CO.

Manufacturers and Dealers in

MACHINERY

FOR

Planing, Matching, Moulding, Tenoning, Mortising, Boring, Shaping, Carving, Etc



176 Terrace St., Buffalo, N. Y.

PATENT

Wood-Working Machinery

Of the Latest and most Improved Design for Planing Mills, Furniture Factories, Chair Factories, Car and Agricultural Works, Carriage and Buggy Shops and

GENERAL WOOD WORKERS,

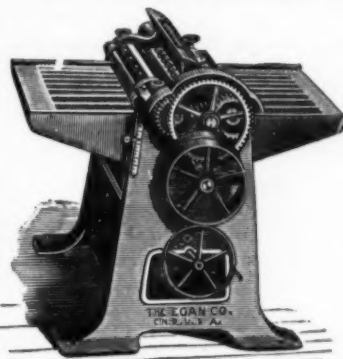
MANUFACTURED BY

THE EGAN CO.

(Successors to the Cordesman & Egan Co.)

228 to 240 W. Front St. Cincinnati O., U. S. A.

Thos. P. Egan, Pres. Ed. Ruthven, Sec. F. Danner, Sup.



A FULL LINE OF

Wood-Working Machinery,

Designed Expressly for

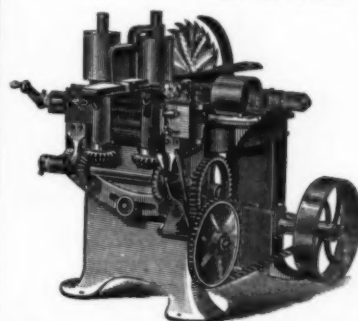
SOUTHERN TRADE.

SPECIAL DESIGNS IN

Re-saws, Planing Machines, Jointers, Band-Saws, Etc.

Send for Catalogue and Prices before purchasing elsewhere. Mention this Paper.

SNIGGS & CO., - - Buffalo, N. Y.



CORDESMAN, MEYER & CO.

171 and 173 West Second Street, CINCINNATI, OHIO.

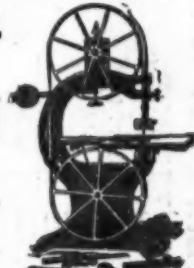
FINE GRADES OF LATEST

Wood Working Machinery

OF EVERY DESCRIPTION.

Planing Mills, Furniture and Chair Factories, Carriage, Wagon and Agricultural Works.

Write for our latest Catalogue and Price List. Correspondence solicited.



E. & B. HOLMES, BUFFALO, N. Y.

MANUFACTURERS OF

BARREL MACHINERY.



Chamfering, Howeling and Crozing Machines, Stave Dressers, Stave Jointers, Hoop Drivers, Crozing Machines, Heading Jointers, Heading Dressers, Beer Stave Benders, Stave Cutters, Leveling and Trussing Machines, Cylinder Stave Saws, Heading Saws, etc.

— STAVE, BARREL, KEG AND HOGSHEAD MACHINERY. —

Correspondence solicited. Mention this name

THE E. HORTON & SON CO.

Windsor Locks, Conn., U. S. A.

Post Office Box 222.

— ONLY MANUFACTURERS OF THE —

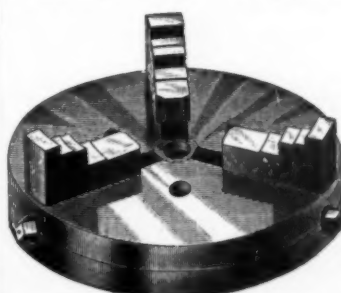
Horton Lathe Chuck

More durable accurate, stronger and lighter than any chuck in market. The only chuck made using the

PATENT JAW,

Which insures perfect accuracy.

Send for Illustrated Catalogue.



Springfield Glue & Emery Wheel Co.

37 Taylor St., SPRINGFIELD, MASS.

Patentees and Manufacturers of

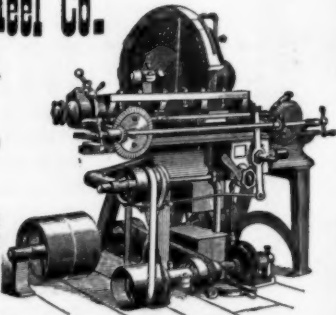
EMERY WHEELS,

and Emery Wheel Machinery.

IMPROVED AUTOMATIC KNIFE GRINDER,

Will grind a knife in one-third of the time needed on any other machine; as water prevents glazing, so wheel cuts faster. Will stop feeding and grinding at any point. Knife can be set with edge up or down, to grind to or from the edge. Water runs on the wheel and prevents all heating and expanding of knife while being ground, so that knife is straight when done.

We make Fifty-five styles and sizes of EMERY WHEEL GRINDERS, so we can furnish them adapted for most any class of work. One Thousand of our Grinders now in use. Write for Illustrated Circular No. F.



Laundry Machinery.

Largest Stock. Latest Improvements. Fullest Line.



Washing Machines,
Ironing Machines,
Centrifugal Machines,
Mangles, Wringers, etc.
BOILERS AND ENGINES.

OUTFITS FOR
Hotels and Public Institutions

A SPECIALTY.

The A. M. DOLPH CO.

295 Wabash Avenue,
CHICAGO, ILL.

Cor. 9th St. and Freeman Ave.,
CINCINNATI, O.

A. HOEN & CO.

LITHOGRAPHERS, BALTIMORE MD.

Our facilities for the production of

ARTISTIC Color Work

AND ALL STYLES OF
Fine Commercial Engraving
Are Unsurpassed.

All work executed under careful
and personal supervision at prices
consistent with first-class pro-
ductions. Sole proprietors of the

CELEBRATED
LITHOCAUSTIC PROCESS
Branch Establishment:
Hoen Building, RICHMOND, VA.



ESTABLISHED 1835.

The True Idea of Assurance.

Women's Mutual Insurance

and ACCIDENT COMPANY.

OFFICERS AND
ELIZABETH B. PHELPS, Pres.
MARGARET HOLCOMBE, Vice-Pres.
EMILY TAYLOR,
Elizabeth S. Roberts, H. Louise Gates,

DIRECTORS:
ELIZABETH HARDENBURGH, Treas.
CORNELIA KAMPING, Actuary.
Secretary.
Charlotte Mulligan, M. F. Hoagland.

ALFRED K. HILLS, M. D., 465 Fifth Avenue.
JOHN A. KAMPING, Attorney and Counsel, 128 Broadway, New York.

MARY PUTNAM JACOBI, M. D., 110 W. 54th Street
Incorporated under the Laws of New York.

ITS OBJECT.
This company is the pioneer in throwing down the bars of unjust discrimination against women in life insurance. Statistics and common observation prove mortality to be in favor of females at every age, and married as well as single. To remove this prejudice, and to secure to women an equal estimation in her insurability, the promoters of this enterprise have devoted themselves. Consistently with this principle WOMEN AND MEN are equally insured in this company without discrimination on account of sex.

ITS MEMBERSHIP
comprises persons between the ages of 16 and 60, of approved physical condition. The Life Class is separate and distinct from the Accident Class, members being liable for losses only occurring in the class to which they belong.

ITS PLAN
secures insurance at cost, and embraces the best features of similar associations, with such improvements added as enlightened experience has shown to be desirable for the member's advantage and the security of the association.

ITS SAFETY AND SECURITY
consists in its ECONOMICAL system, its IMPOSSIBILITY of insolvency, and its SECURITY RESERVE FUND.

FINALLY.
This company avoids complicated schemes and plans by means of which impossible results are promised. Its contracts are plain, easily fulfilled and liberal. It issues the following forms:

1. Ordinary Life Policy, \$100 to \$10,000.
2. Ordinary Accident Policy, \$5,000 death indemnity; \$25 weekly.
3. Combined Life and Accident Policy.
4. \$500 Savings Bond.

BANKERS:
BANK OF THE METROPOLIS, New York City.
DEPOSITORY OF RESERVE FUND:
FARMERS' LOAN AND TRUST CO., New York City
The officers would be pleased to furnish any further particulars which may be desired in relation to the Company's affairs, or the way to obtain a policy.
Agents are desired in every city, village and district throughout the healthful sections of the country.
Address all communications to the

WOMEN'S MUTUAL INSURANCE AND
ACCIDENT CO.,
128 BROADWAY, NEW YORK

Look Carefully through this paper and you may find an advertisement of some machinery or other goods that you are in need of. Preserve this copy for future reference.

Queen City Printing Ink Co.

CINCINNATI, OHIO.

WITH WHICH THIS PAPER IS PRINTED.
IS MADE BY THE
THE INK QUEEN CITY PRINTING INK CO.
CINCINNATI, O.

MANUFACTURERS OF ALL DESCRIPTIONS OF

INKS!

Varnishes and Sizes

FOR PRINTERS' USE.

New York Office, . . . 194 William Street.

Philadelphia Office, . . 434 Walnut Street.

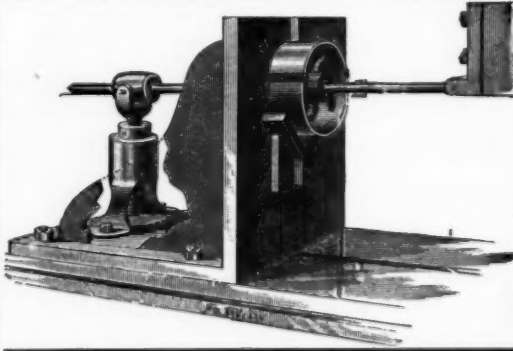
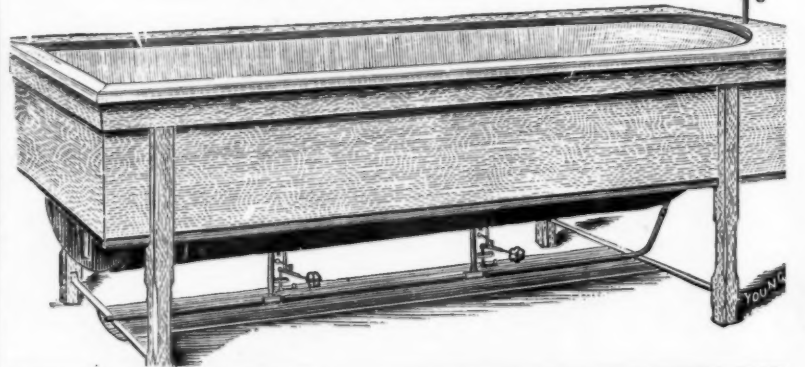
DAY'S SELF-HEATING BATH-TUB,

Heated by Gas, Gasoline or Kerosene.

MANUFACTURED BY

THE DAY MANUFACTURING CO., - Detroit, Mich.

Send for Descriptive Circular.



DEFINGER'S PATENT Key-Way

CUTTING MACHINE.

Best Key-Way Cutter in the Market.

Gives Perfect Satisfaction.

Write for Circular and Prices.

J. L. DEFINGER,
STAMFORD, CONN.



Importers and Receivers of

CEMENTS

ALL KINDS.

Heyn Brothers' Portland,
Round Top, (for Water Works.)
Cement for Cisterns and Floors.

Salt-Glazed Sewer Pipe.
Chimneys, Flue Linings, Stove Pipe, &c.
Fire Brick, Ven. Red, Mortar Colors.

WM. WIRT CLARKE & SON, 115 S. Gay Street, Baltimore, Md.

ESTABLISHED

POOLE & HUNT,

—1851—

Founders and Machinists.

POOLE & HUNT'S LEFFEL TURBINE WATER WHEEL,

Prices as Low as any other First-Class Wheel.



Machine Moulded

MILL GEARING.

Our plant for the production of MACHINE-MOULDED MILL GEARING is unequalled in the country, and we are prepared to fill orders with dispatch and at GREAT SAVING IN COST OF PATTERNS.

Shafting, Pulleys, HANGERS, PEDESTALS.

SHAFTING, PULLEYS, HANGERS and COUPLINGS, of latest and most approved designs.

N. B.—Shipping facilities the best in all directions.

Send for Pamphlet. Send for Price-List.

Last of our Gear-
ing Mailed on
Application.

POOLE & HUNT, BALTIMORE, MD.

SOUTHERN SELLING AGENTS

CROOK, HORNER & CO.
Baltimore, Md.

SHAW & DAVIN
Birmingham, Ala.

MECKLENBURG IRON WORKS
Charlotte, N. C.

VALK & MURDOCH
Charleston, S. C.

E. V. WHITE & CO.
Norfolk, Va.

Boston

Philadelphia

Chicago

St. Louis

SOUTHERN SELLING AGENTS

M. SCHWARTZ
New Orleans, La.

ATLANTA ENGINEERING CO.
Atlanta, Ga.

KENTUCKY MACHINERY CO.
Louisville, Ky.

W. H. PERRY
Nashville, Tenn.

LIVERMORE FOUNDRY & MACH. CO.
Memphis, Tenn.

San Francisco

Worthington STEAM PUMPS

SEND FOR ILLUSTRATED CATALOGUE

HENRY R. WORTHINGTON
NEW YORK

The York Ice and Refrigerating Machines

York Mfg. Co.
YORK, PA.

E. C. HUXLEY, Pres.

T. L. STURTEVANT, Treas.

THE STURTEVANT MILL.

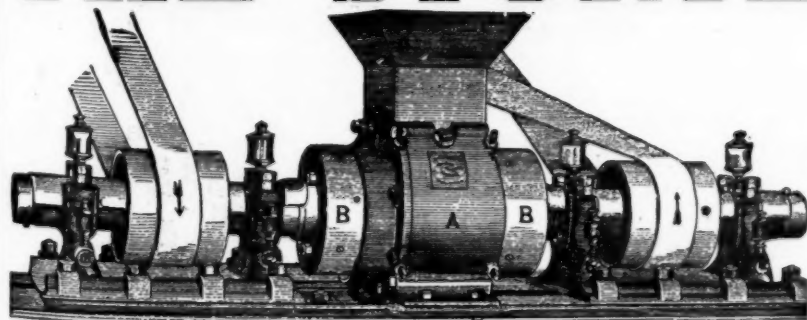
ROCK CRUSHER

—AND—

PULVERIZER COMBINED.

FOR GRINDING AND CRUSHING

Cores, Phosphates, and Other Hard Substances.



Developing an entirely NEW PRINCIPLE. Avoiding the usual wear and tear of machinery, and doing in a much more rapid and thorough manner the work of a crusher and stamp mill combined. The attention of all those interested in the crushing or grinding of Ores, Phosphates, and other hard substances, is called to the absolute originality of this invention, as it is the first mill ever constructed where the rock is made to grind itself. The expense of wear and tear is 75 per cent. less than any machine ever invented. No expensive foundations. No skilled labor required. One mill equal to a 30-stamp battery and crushers combined, occupies space of 12 feet by 4 feet in width. These machines are in operation on a large scale. Every mill warranted to do all claimed for it. Send for catalogues of this wonderful machine and full information.

FRASER & CHALMERS, Sole Manufacturers,

45 Fulton Street, Chicago.

2 Wall Street, New York.

11 Calle de Juarez, Chihuahua, Mexico.

423 Blake Street, Denver.

STURTEVANT MILL CO., 89 MASON BUILDING, BOSTON, MASS.

LITTLE GIANT PORTABLE FENCE LOOM.

Weaves the Fence on
the Posts in Position.

Save Money by Building
Your Own

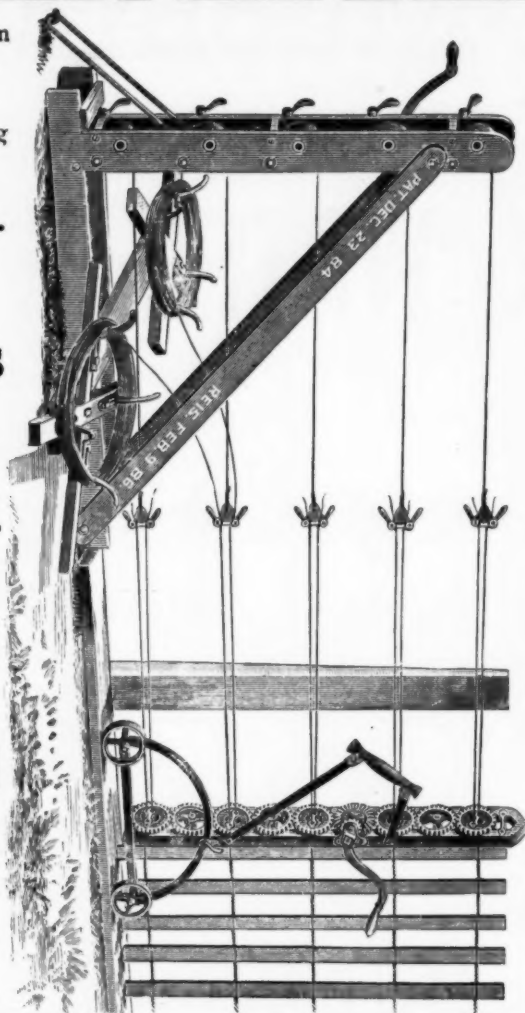
FENCES.

Costs But
56 CENTS
per Rod to Build.
CAPACITY
40 RODS PER DAY.

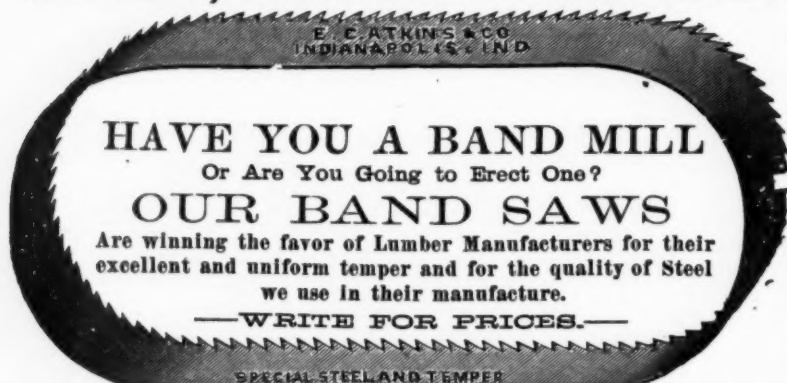
Manufactured by

**RICHMOND
Check Rower Co**

1100 and 1102
NORTH E ST.,
RICHMOND, IND.



E. C. ATKINS & CO.
INDIANAPOLIS, IND. MANUFACTURERS OF MEMPHIS, TENN.
Circular, Cross-Cut AND Band Saws.



Use only the best Cross-Cuts. Our Cross-Cuts are acknowledged as incomparably the best in use. We are agents for Tanite Emery Wheels and Grinding Machinery.



Chapman Valve Mfg. Co.
MANUFACTURERS OF

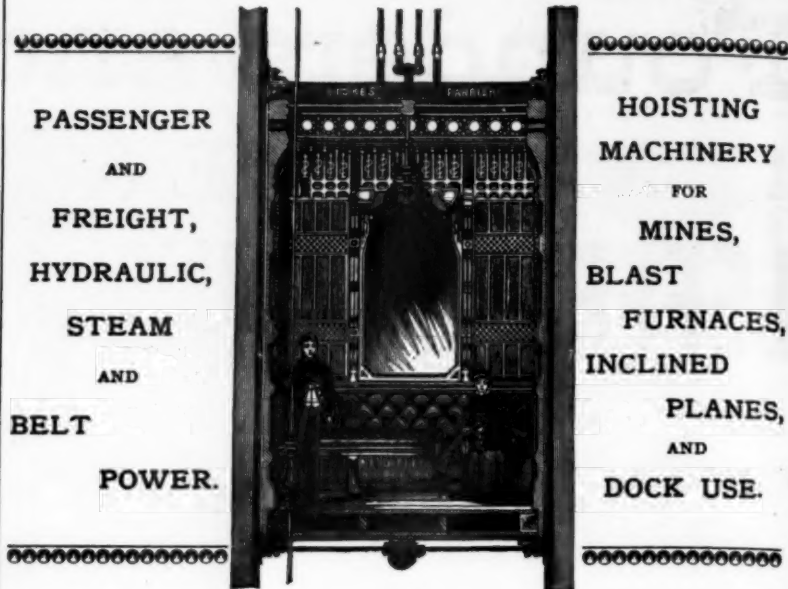
STEAM, GAS AND WATER
Valves and Gates.
Fire Hydrants

With or Without INDEPENDENT VALVES.
General Office and Works,
INDIAN ORCHARD, MASS.

Treasurer's Office,
Mason Building, 72 Kilby and 112 Milk Sts., Boston.
ALL WORK GUARANTEED.

Send for Descriptive Circulars and Price-List. Correspondence solicited.

Stokes & Parrish Machine Co.



PASSENGER
AND
FREIGHT,
HYDRAULIC,
STEAM
AND
BELT
POWER.

HOISTING
MACHINERY
FOR
MINES,
BLAST
FURNACES,
INCLINED
PLANES,
AND
DOCK USE.

ELEVATORS

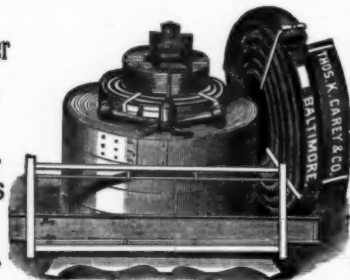
SAFETY, SPEED AND ECONOMY.

WORKS AND OFFICE:
30th and Chestnut Sts.,
PHILADELPHIA.

BRANCH OFFICE:
95 & 97 Liberty Street,
NEW YORK.

THOMAS K. CAREY & CO.
Leather ★ Belting,

AGENTS FOR
Boston Belting CO's Rubber
Belting Packing Hose, &c.
"J. B. HOTT'S" SHORT LAP
Leather Belting.
T. K. EARLE MFG. CO'S
MACHINE
Card Clothing.



COTTON,
WOOLEN AND
Flour Mill Supplies
MECHANICAL
RUBBER GOODS, &c.

No. 25 S. CHARLES STREET, BALTIMORE, MD.

JUST ISSUED! And Mailed FREE on Application,
Catalogue No. 5, Jan. 1, 1887.

CLAYTON AIR COMPRESSORS,
Rock Drills, Mining Pumps, and General Mining Machinery.
For CATALOGUES, ESTIMATES, Etc., Call or Address
Clayton Air Compressor Works, Office, 43 DEY ST., NEW YORK.

Buffalo Cupola & Forge Blowers,
PORTABLE FORGES,
Blacksmiths' Hand Blowers,
STATIONARY BLAST FORGES,
HEATING AND ANNEALING FURNACES.

Buffalo Forge Co.

490 BROADWAY, BUFFALO, N. Y.

